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ORGANIZATION, STRUCTURE, AND DECISIONMAKING PROCEDURES OF THE DEPARTMENT OF DEFENSE

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ORGANIZATION, STRUCTURE, AND DECISION-MAKING PROCEDURES OF THE DEPARTMENT OF DEFENSE

WEDNESDAY, NOVEMBER 16, 1983

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

PROCUREMENT PRACTICES

The committee met in open session, pursuant to notice, at 10:08 a.m., in room SR-222, Russell Senate Office Building, Senator John Tower (chairman) presiding.

Present: Senators Tower, Warner, Cohen, Quayle, Wilson, Evans, Nunn, Kennedy, and Bingaman.

Staff present: James F. McGovern, staff director and chief counsel; James G. Roche, staff director for the minority; Alan R. Yuspeh, general counsel; Paul C. Besozzi, minority counsel; Brenda K. Hudson, assistant chief clerk; Michael B. Donley, Richard D. Finn, Jr., James R. Locher III, David S. Lyles, Bruce D. Porter, Arnold L. Punaro, Patrick L. Renehan, and Carl M. Smith, professional staff members; Douglas R. Graham, research assistant; Tamara L. Farnsworth, Patricia L. Watson, and Toni D. White, staff assistants.

Also present: John G. Campbell and Guy Copeland, assistants to Senator Warner; Robert Savitt and Jeff Minsky, assistants to Senator Cohen; Jon Etherton, assistant to Senator Jepsen; Henry J. Steenstra, assistant to Senator Quayle; Mark J. Albrecht, assistant to Senator Wilson; Matthew H. Murray and James Steinberg, assistants to Senator Kennedy; Edward McGaffigan, Jr., assistant to Senator Bingaman; and Ralph White, assistant to Senator Levin.

OPENING STATEMENT BY SENATOR JOHN TOWER, CHAIRMAN

Chairman TOWER. The committee will come to order.

The committee meets this morning for the 10th in its series of hearings on organization and decisionmaking procedures of the Department of Defense.

In most of our prior hearings, we have focused on different organizational elements of the Department of Defense. We have looked at the Office of the Secretary of Defense, the Joint Chiefs of Staff, the military departments, and the unified commands.

Last week we took a slightly different approach by looking at the budget process, which cuts across all elements of the Department.

This morning we will do the same thing with the procurement process.

Few subjects have received as much attention recently as the process through which the Defense Department procures weapon systems. The process by which weapons requirements are generated is obviously critically important to our national defense.

In addition, the acquisition process is the means by which scarce resources are allocated among competing requirements.

Finally, we are all concerned about having an acquisition process which insures the Defense Department will receive weapons that work and that are purchased at the lowest possible cost.

Our focus this morning is on the organization and decisionmaking process associated with defense systems acquisition. I know that many Senators are interested in other procurement issues, such as competition, types of contracts, or auditing practices.

Today, however, I would like to try to focus on the division of responsibility for procurement decisions and on whether the procurement decision process promotes the goals of a sound procurement system.

We are pleased to have with us this morning four witnesses with extensive backgrounds in all facets of defense procurement.

Our first panel today will consist of Dr. Richard DeLauer and Mr. Frank Carlucci.

Dr. DeLauer is presently the Under Secretary of Defense for Research and Engineering and formerly the executive vice president of TRW.

Mr. Carlucci was formerly the Deputy Secretary of Defense and is presently the president of Sears World Trade.

A second panel this morning will be comprised of Mr. David Packard and Mr. Norm Augustine.

Mr. Packard served during the Nixon administration as Deputy Secretary of Defense and is presently the chairman of the board of the Hewlett-Packard Corp.

Mr. Augustine was formerly the Under Secretary of the Army and presently serves both as Chairman of the Defense Science Board and as president of Martin-Marietta Denver Aerospace.

We have asked Mr. Packard and Mr. Augustine to join us this morning not only to draw on their extensive Government experience, but also to solicit from them an industry perspective on the procurement process in DOD.

Before recognizing Dr. DeLauer to kick the meeting off this morning, let me yield to Senator Kennedy for any comments he may have.

Senator KENNEDY. I have no comment, Mr. Chairman, I just think these hearings are very important. I think we have some very capable witnesses to address the issues which you have outlined in your statement. I look forward to hearing from them.

Thank you.

Chairman TOWER. Dr. DeLauer, will you start, please? You may submit your comprehensive statement for the record and summarize it, and you may submit any material for the record and it will be incorporated in the record.

You may proceed as you choose.

STATEMENT OF HON. RICHARD D. DeLAUER, UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING

Dr. DeLauer. Thank you, Mr. Chairman.

I appreciate the opportunity to present our views on how we are doing in the Defense Department on systems acquisition and acquisition generally.

I would indeed like to submit my statement for the record and I would like to summarize in a short fashion some of the high points that this committee might be interested in and then submit to questions.

All right with you, sir?

Chairman Tower. Proceed.

Dr. DeLauer. As you know, our approach to management, because we have had discussions in front of this committee and other committees in Congress, is one in the Defense Department at the present time of a proper balance between centralized policy formulation and resource allocation on the one hand and decentralized program execution on the other.

In order for this concept to be effective, it is imperative to have the necessary management oversight to insure that policies and plans are being implemented. Since the Carlucci initiatives were adopted over 2 years ago, the Department has made reasonably good progress in implementing this philosophy.

Let me briefly outline the process.

Our defense requirements are established each year by the Secretary in cooperation with the services and the Joint Chiefs through the Defense guidance document.

The service then submits a propsed 5-year plan called program objective memorandum, POM for short, to the Secretary based upon this guidance and preliminary allocations of resources to each of the services.

These plans are then analyzed for completeness and consistency with our basic policy by the OSD staff, my staff, program analysis and evaluation and the Comptroller's staff.

We aggregate our comments and proceed to identify the issues. Now, any inconsistencies as a result of these issues are then brought before the Defense Resources Board, the DRB.

The DRB is chaired by the Deputy Secretary and is the major decisionmaking body in the Department resource allocation process. This was one of the major improvements that came about as a consequence of Frank Carlucci's leadership when he was Deputy Secretary.

What we have done is put resource allocation, those areas that we spend our money on, with the program budgeting system and integrate those together and have it done in a collective way.

Now, the DRB incorporates participative management that governs the Board activities. It includes representation by all major DOD components, the service Secretaries, and the JCS. They are all full members of the Defense Resources Board and participate in all decisions.

The focus of the DRB, however, is upon the issues where resources do not fulfill the policy objectives. Where resources and guidance are consistent, no consideration by the Board is required or given.

Let me give you a sense of the degree of DRB's involvement in the budget process. The review issues settled by the DRB restructured approximately $7 billion of the research and development and acquisition total budget requirements. This represents about 8 percent of the resources allocated to the areas of research and development and production.

So, essentially the mismatch was not over 10 percent. The most mismatches occurred when one service neglected to fund a particular program or a project that was called for under the defense guidance and it was up to the DRB to handle this mismatch.

That is essentially what the DRB does most of the time, handling the mismatch. It is an oversight of inconsistencies which we attempt to resolve at that time. We do it on a 5-year plan basis, so as the process proceeds, the amount of mismatches grows less and less because we have resolved them earlier. The outyear funding is also included.

Now, as a partner in the defense acquisition management process, we believe Congress shares a responsibility to participate in policy formation and implementation. The role of Congress should be pretty much the same as for OSD, that is, of oversight, one of looking at the mismatches and being sure that they are correct.

However, it seems over the years that Congress has digressed from this management oversight role, from one in which they participate in establishing policy objectives and measuring DOD's progress toward achieving these goals, to one where they are line item managing the institution.

Now, the consequences of this is that we really do lose program stability.

I think the solution to this, and I would like to suggest this to this committee to review and to consider, is that Congress should raise the level of oversight to areas that represent the mission of the Department and should examine how the Department is managing their affairs to meet that mission.

To give you an example, I think the strategic program, the coherent overall strategic program, is once Congress has examined in detail and found that we have indeed provided for a full program, including management control, land-based ICBM's, the air-breathing leg, and the underseas leg.

After Congress saw that the program was reasonably coherent, they focused on a particular system or subsystem. No question, the MX was one they focused on. They focused not on MX first, but only after they looked at the overall strategic package. On the parts they felt were adequate Congress left us alone. I commend you on it.

You have done that to a degree in the mobility area, particularly as far as air mobility is concerned. You have not done so for land and sea mobility, which is also important.

Let me assert that this kind of overview has not been done to our conventional forces. I think it ought to be. Instead, we have been managing the conventional forces line item by line item both in the authorization process as well as in the appropriation process.

Where does this lead us? This leads to a situation where we lack stability in our programs. As a consequence, we have to keep modifying programs from year to year. This does not result in a coherent way to have the minimum cost acquisition process.

In a sense, the Department has been playing a prevent defense when it comes to some of these particular items, not as referred to the other day where the team had a prevent offense. Sometimes I worry whether we have a prevent offense also.

Now, Congress needs information in order for them to perform this oversight function, and I would like to give you an example of where I think some information is needed and other information is not. This is a thing that Senator Cohen and I have talked about in the past.

I am referring to the System Acquisition reports. We present to Congress at your direction, reports on a quarterly basis that report to you actual costs incurred, estimates for the future, and inventory objectives on major weapon systems.

This has gotten to the point now where we are reporting on something like 80 or 90 programs, programs that go way out in the future.

I have made this suggestion before and I would like to make it again to this committee; I would like to see these system acquisition reports based on 5-year projection. It would match our program objective memorandum.

You could hold our feet to the fire on managing to what we say we are going to manage over a period of time in the future that is reasonable to forecast.

It is nonsense to think that our Department can assess the effectiveness of a particular system, its unit cost, and the total inventory objective 15 years in the future. It is impossible.

We can tell you what we think the future requirements are going to be, give you an estimate, but we are sure the development can be managed on a 5-year period.

I suggest this would be a positive change in the way that we would communicate with the Congress on how we are spending the taxpayers' money.

Now, I think that there is probably one area that you find where we are consistent. I have read Frank Carlucci's testimony. Paul Thayer testified a month or so ago, and the Secretary has also testified. We keep beating the drum of program stability, and yet every year programs are adjusted in the Congress in such a way that it is almost impossible to have program stability.

This committee was instrumental in approving the concept of multiyear funding. We have not been able to get the promise of multiyear funding because of the lack of total congressional support for the concept.

My estimate is that if we could have program stability, we could take from 5 to 6 years out of the acquisition cycle with a tremendous cost saving.

Now, one of the problems with program stability is our single-year funding on most programs. I would like to strongly endorse our Secretary's recommendation to you that Congress adopt a 2-year budget cycle to help alleviate this instability problem. It would shorten the time it would take to achieve inventory objectives and would save money. Time is money any way you look at it.

Now, another contributing factor to instability is the way that Congress allocates the funds. You are well aware that we have research, development, test, and evaluation funding, RDT&E, and we have production funding.

One of the Carlucci initiatives when this administration took office was to ask the Congress for ability to be able to transfer money back and forth between these two accounts. I submit to you, sir, that in the acquisition of systems it is impossible to tell you which money should be applied to manufacturing and which should be applied to testing and which should be applied to development before the fact.

You should be worried about how you are going to support the system the day you design it. You should be figuring on how to produce the system, how to manufacture it during the design process. You should have the ability to be able to modify that as the testing program proceeds.

If, indeed, we could have one-color money, I guarantee that we would save money in the process. Again, that is something that has to be done over here in the Congress.

The area that I think we need the most improvement in, Mr. Chairman, is one on which we are more critical than you are—we have finally found one—and that is the transition from development into manufacturing. That is the area that has for so long caused so much trouble.

We are in the process of modifying our acquisition regulations such that manufacturing is considered very early in the design process. I think this initiative will go a long way to improving our ability to be able to avoid essentially production surprises.

We would like to have you support us in this area.

Now, there is also concern about competitive procurement. You mentioned that in your opening statement. I think that, in my view, part of the problem lies in the definition of the term. One person's competitive procurement is another person's sole source.

When we compete a major system for procurement, I will guarantee you that competition is fierce. The selection process is exact and complete. During that process we select a particular contractor or contractor's team to implement the program. Then we generally fund it for 1 year.

In the nature of the funding, the second year we fund the program again by a new contract or an extension of the existing contract. In the parlance of Congress, that is sole-source procurement.

That is not so. It is an extension of a competitive procurement process. If we had 2-year funding, that would go a long way toward alleviating that.

On the other hand, with programs that have a high inventory objective over a long period of time, dual sourcing is indeed a preferred way to go. We have attempted to do this in many cases.

Dual sourcing costs money. You have to qualify both contractors. So, the trade-off for up front funding for qualification and downstream savings from competition have to be very carefully examined and matched against what our inventory objective is going to be.

I should like to suggest that this area be also examined by the committee to see whether or not some reforms can be made. These are the areas that I think are highlighted in my job as the acquisition executive.

I think I will close at this time, Mr. Chairman, and open it up to questions.

[The prepared statement of Dr. DeLauer follows:]

PREPARED STATEMENT BY DR. RICHARD D. DELAUER, UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING

Mr. Chairman and members of the committee, I would like to take the opportunity this morning to discuss first some of the basic characteristics of sound management problems. I will also outline the basic elements of acquisition management within the department and suggest some areas where, with your support, we can improve the process.

MANAGEMENT PHILOSOPHY

Our approach to management is one in which we strive for a proper balance between centralized policy formulation and resource allocation on one hand, and decentralized program execution on the other. In order for this concept to be effective, it is imperative to have the necessary management oversight to insure that policies and plans are being implemented. Since the Carlucci initiatives were adopted over two years ago, the department has made great progress in implementing this philosophy. Within the department we have made significant progress toward implementing a more efficient and effective management focus.

Before I describe the major organizations and offices which are involved in managing the acquisition process within the department, let me outline briefly the process. Our defense requirements are established each year by the secretary in cooperation with the services and the Joint Chiefs through the defense guidance. The services submit a proposed five year plan called the program objective memorandum [POM] to the Secretary based upon the defense guidance. The service plans are analyzed for completeness and consistency with our basic policies. Any inconsistencies result in issues which are brought before the Defense Resources Board [DRB].

The DRB, chaired by the Deputy Secretary, is the major decisionmaking body in the Department's resource allocation process. Participative management governs the Board's activities since high level representatives from all major DOD components, including the service secretaries and JCS participate in DRB decisions. The focus of DRB attention, however, is upon issues where resources do not fulfill policy objectives. Where resources and guidance are consistent, no consideration by the DRB is required or given.

To give the committee a sense of degree of DRB involvement in the resource allocation management process, during this year's program review, issues settled by the DRB accounted for about three percent of the total funding requests submitted in this year's POM's. Moreover, this small proportion represented only issues of highest priority where the DRB decided that the initially proposed resources were not appropriate for the required task.

As a partner in defense acquisition managment, Congress shares the responsibility to participate in policy formulation and implementation oversight. However, it seems that over the years, Congress has digressed from an oversight role in which it would participate in the establishment of policy objectives and measure progress toward achieving the policy goals. Unfortunately, congressional oversight has become far too detailed to provide policymakers or the public with a coherent view of our accomplishments or our needs. The solution to this problem comes down to asking the right questions, receiving the appropriate information and intervening only when things go off track.

For example, we should be asking questions about our objectives on the basis of mission areas. "Where are we going," we should ask, "in strategic forces, air, sea and land mobility, conventional forces, et cetera?" We have worked this problem pretty well in the areas of strategic offensive forces and in air mobility for example. We haven't yet done well at all, however, in sea and land mobility, or in the general area of conventional forces.

We have observed, however, congressional oversight in practice has become more of an annual exercise in line item management. Due to the parochial interests of constituencies and the increase in size and diversity of congressional staffs, every year we must assume a "prevent defense" on a programmatic basis. What is needed is increased awareness of our mission goals and our progress toward their achievement—not whether this or that program needs to be adjusted.

The information which is provided to congress needs to reflect the oversight function which I have described. For example, the selected acquisition reports [SAR's] to congress need some modification in order to be more meaningful for effective oversight. First, I believe [SAR's] should be based on a 5-year planning period rather than the total program inventory objective as is presently the case. The problem is that adjustments to these outyear inventory objectives change program costs. The result looks like poor management rather than a reflection of the uncertainties of these outyear projections. To make valid estimates of the inventory objectives for our major systems beyond a 5-year period and have them be meaningful is unbelievable. We recognize the need to have planning figures for the total program, but the uncertainty in these numbers must also be acknowledged.

In addition, congressional oversight should be practiced on a "by-exception" basis where only the major problems are addressed. Recent changes brought about by the Nunn-McCurdy Act have increased the reporting requirement for major systems by almost 50 percent. This additional requirement necessitates thousands of additional manhours of preparation and review for a variety of systems, many of which are not sufficiently mature to establish a meaningful baseline. Moreover, the programmatic structure of the SAR reinforces the line item management mentality of which I have already spoken.

Everyone agrees that what is needed most of all in the acquisition process is greater stability. Yet, each year we observe that hundreds of programs are adjusted by the Congress in accordance with undefined priorities. The following year, we must return to Congress to attempt to get essential programs back on track. As a result of our adjustments and other inefficiencies, it now takes from 12 to 17 years to complete the acquisition process for most major items. If we could simply recognize the instability which we introduce into the acquisition process and the consequent cost—both in dollars and national security—we will have achieved a major step forward. We are moving forward on improving stability through many of our initiatives such as multiyear procurement, economic production rates, and realistic budgeting. However, much more needs to be done. I strongly endorse the Secretary's recommendation, for example, that the Congress adopt a two year budget cycle to help alleviate the instability problem. I believe it would reduce the average time needed for completion of the acquisition process, and would also mean significant cost savings in the long run.

Another contributing factor to ineffective management which constrains the acquisition process is the artificial distinction which is made among various types of funding. The acquisition process embraces exploratory research, engineering development, manufacturing assembly and deployment. To assume that these phases can be defined and funded in a rigid manner—RDT&E and production—is nonsense. It is artificial and expensive. Resources should be applied as is necessary to do the job in the most efficient way. Line managers who are close to the program should retain the flexibility to make these judgments and act accordingly. If we could remove this artificial distinction in characterizing funds, I believe we could save money and shorten the process as much as 10 to 20 percent.

We are now trying to add more emphasis to the critical transition period from R&D to manufacturing. We are establishing a new DOD directive to enhance our attention to this problem, and I am looking at ways to strengthen the production and manufacturing areas within DOD. I think we need to "beef-up" the R&E organization in this area. We may well need additional manpower spaces to devote to this problem.

Another subject which causes us great concern is the present definition of competitive procurement. The way we keep score is very misleading to the uninitiated, and we need to redefine the terms. Practically all of our programs are initially competed, and we examine the acquisition strategy in great detail to seek opportunities for dual sourcing. We particularly try to pursue competition at the subcontractor and vendor levels. Because our procurement programs are funded on an annual basis, however, we do not get credit—in a competitive sense—for follow-on buys for programs which reaped the benefits of competition earlier. It makes no sense, for example, to develop a second source for an F-15 or F-16 aircraft at this point. These programs experienced vigorous competition early in their development. The same is true for most of our major programs. This is just another area where we suffer "bad press" for something which is really not a problem.

ORGANIZATION OF DOD ACQUISITION MANAGEMENT

A number of organizations and offices play a variety of roles in the defense acquisition process within the context of the management philosophy I have described. Let me briefly summarize some of the more important ones and discuss their respective roles:

I have already mentioned the DRB and the vital role which it plays. Of course, there is also the Under Secretary of Defense (Research and Engineering)/Defense Acquisition Executive. As the Principal advisor to the Secretary on scientific and acquisition issues, I exercise oversight on scientific and technical matters of basic and applied research, and the development and acquisition of our weapons systems. It is my duty to insure that activities in these areas adhere to departmental policies and national security objectives. I participate in the review and evaluation of requirements and priorities and make certain that our programs are designed to accommodate operational requirements. It is also my responsibility to follow up and evaluate programs for carrying out approved acquisition policies and standards. Through my participation in the planning, programing, and budgeting system, I review proposed programs and resources and recommend resource allocations in accordance with national security policy and priorities. Finally, as Defense Acquisition Executive [DAE], I serve as the chairman of the Defense Systems Acquisition Review Council which exercises oversight and advises the secretary on the management process, policies, and procedures for acquiring our major programs.

Though the list of my duties and other organizational commitments could go on, let me just emphasize an important aspect of my job about which some of the members of the committee have indicated concern. The concern involves an apparent conflict of interest between my role as manager of research and engineering and as the director of acquisition.

Quite frankly, for a variety of reasons, I see no conflict at all. First, there is considerable overlap between the functions of development and production which requires constant oversight in order to manage the transition effectively. Development and product cannot be nearly separated. My office possesses the technical and management skills to exercise effective oversight in this area.

Second, by virtue of my role in the planning, programing, and budgeting process, as well as my position as DAE, I can help to insure that consistency exists between our policies and requirements and the systems which we acquire. Although the ultimate responsibility regarding this fundamental objective is shared by the Secretary, the President, and the Congress, at some point in the management process, the important pieces of the puzzle must begin to fit together. My duties assure that this process can appropriately be undertaken in the Office of the Under Secretary for Research and Engineering.

Another important element within the Department's oversight function was instituted by the Secretary shortly after he took office. Each week on a rotating basis, the service Secretaries report to the Secretary on one or two major programs to discuss problems and possible solutions. For some of our more critical systems, program personnel provide regular reports directly to the Secretary on a biweekly or monthly basis. These "Secretarial Performance Reviews" with which I am also involved, are an essential part of the management philosophy I described at the outset of my statement—high level oversight of high priority major issues.

No discussion of acquisition management is complete with recognizing the hard work accomplished by the various program offices, the buying commands, the Joint Logistics Command, and the Defense Logistics Agency. The personnel employed in these organizations perform an outstanding job of executing the programs, policies, and procedures which confront them daily. We are doing our best to make their jobs easier through various acquisition reforms such as reducing the number of directives and carefully screening contractual data requirements. We maintain close contact with the joint logistics commanders to insure that these and other important acquisition reforms which affect the buying community are fully implemented.

The Inspector General [IG] is another important participant in the acquisition management oversight function. The IG performs essential audits and reviews to insure that waste, fraud, and abuse are purged from the system. In addition we receive valuable insights on how to improve the acquisition management process from the Council on Integrity and Management Improvement [CIMI] which is chaired by the Deputy Secretary. The Council is a high level group which meets to explore new ideas and opportunities for progess in management on a DOD-wide basis. Specific management issues are regularly considered and the Council makes recommendations to the Secretary for his resolution. The Defense Science Board is another important organization which is external to the Department and which draws together management ideas from key elements within DOD, industry, academia, and the scientific community.

Finally, I must recognize my "right-hand woman" who serves as the Deputy for Acquisition Management. Mary Ann Gilleece is my principal adviser on acquisition matters and is the primary policy maker for all DOD procurement and production policy. She is responsible for implementing Federal policies on acquisition, the formulation and revision of defense acquisition regulations, specifications and standards, and other policies. Ms. Gilleece is also my principal advisor in deliberations of the DSARC on acquisition matters, including the implementation of acquisition improvement program initiatives.

The members of this committee are doubtless aware of many of the important strides we have made in implementing various initiatives of the AIP. I won't review in detail the progress we have made through the good efforts of Ms. Gilleece and many others, but let me highlight some changes we have initiated within the DSARC process which make our management more efficient and effective.

First, as I stated at the outset, we have instituted controlled decentralization throughout the process. The service Secretaries, for example, now serve as full members of the DSARC and contribute to policy formulation and program execution. At the same time, we have streamlined the acquisition process in order to accelerate the results and avoid micro-management. The front end review of new programs is now done during the POM review process to insure that the new starts are both required and affordable.

In addition, by revising the threshold which defines a major system to $200 million in R&D and $1 billion in procurement, we have insured that high level management attention is placed on programs of major significance. Major milestone decisions on ten programs were delegated back to the services when we instituted this change in 1981, and milestone decisions for an additional 10 or so programs have been precluded from the DSARC process since that time. Partly as a consequence, DSARC activity during the last 3 years has decreased significantly from 12 meetings in 1981 to five meetings thus far in 1983. I should add that much of what might have required a DSARC in the past has been replaced by much less formal program reviews which focus on specific major problem areas. Fewer pre-reviews and reduced documentation has been a major benefit.

All major programs proceed through the DSARC process to milestone II when a program is baselined at full scale development. If a program stays within baseline objectives, the final production decision is made at the appropriate management level, i.e., the service. If a program exceeds its baseline objectives, however, it remains subject to further DSARC review before a production go-ahead can be given.

At each DSARC milestone we review acquisition strategy and examine the potential for competition, including the possibility for dual sourcing. We insure that support and readiness are given proper consideration, and determine whether a program meets the criteria to become a multiyear candidate. In addition, greater emphasis is now being placed in the DSARC on improved production engineering preparation to east the difficult transition from development to manufacturing. We also examine other AIP initiative areas such as the potential to apply a pre-planned product improvement [P3] approach. In addition, the Cost Analysis Improvement Group [CAIG] examines cost estimates at each milestone in order to insure realistic budget estimates. In short, each DSARC meeting is an opportunity to confirm that the acquisition policies we have adopted are being considered and executed properly at lower levels of management. The DSARC process is alive and well and more effective than ever as a means to improve our management of the acquisition process.

OTHER MANAGEMENT ISSUES

The committee has also indicated its interest in the area of joint service program management as a means to increase efficiency and otherwise reduce the aggregate costs of weapons systems development and procurement. Although the benefits of joint service programs can be attractive, expensive failures have occurred too often in the past and counsel caution as we proceed forward. A balanced approach is needed whereby specific service requirements are carefully examined to insure compatibility before proceeding on a joint basis. Our basic goal is to increase cross-service coordination in the development and use of systems and technology of similar purposes to obtain maximum performance at minimum cost.

Some recent examples where we are making important progress involve joint activities in specific mission areas. The Navy and the Air Force, for example, have achieved important progress in coordinating their efforts regarding fleet air defense and sea control. The decision to designate a number of B-52's to support the Navy's sea control mission is a good example of the benefits of improved cross-service coordination and management. Similar efforts are being conducted in the deep interdiction mission area where hardware development as well as employment doctrine and concepts are being examined on a joint basis. We are confident that the results of this joint effort will produce an effective means to solve the second echelon problem in the most economical way possible.

We are considering some important steps to institutionalize our approach and practices concerning joint service programs. As a result of a study conducted this past summer by the Defense Science Board, a joint requirements and management board comprised of the service vice-chiefs, the Director of the joint staff and OSD components is being contemplated. The Board's primary purpose would be to provide a rigorous review of the requirements process and identify those with potential for joint service applicability. The Board would provide a more systematic way of examining the possibilities for joint programs that we have had in the past.

Another area of particular interest these days concerns the acquisition of spare parts—the horror stories which have created understandable concern among all of us. First, may I point out that our system of management works. Employees of the Department discovered and reported the problem, and the management of the Department has taken corrective measures. Secretary Weinberger's 10 point program on spare parts procurement reform has already revised much of the way in which we do business.

Contracts to purchase spares are being written to insure that spares are purchased competitively to the maximum extent possible. Steps are being taken to insure that manufacturers of parts are identified and that complete technical data packages become available so that we are not at the mercy of the prime contractor in the future. The bidders for the new fighter engine—Pratt & Whitney and General Electric—are being required to submit plans to show how they will develop two or more qualified subcontractors who would remain available for production of the 30 replenishment spares with the highest procurement value. Since those high value parts comprise about 80 percent of the value of the engine, we can focus our efforts on gaining competition for the remaining 20 percent.

In addition, we are building incentives and disincentives into the spares management process. The Air Force sergeant who reported a case of pricing abuse was recently awarded $1,100—the amount the Air Force was being charged for the spare part. Where an employee's negligence has contributed to excessive prices, we are taking disciplinary action. Where industry is at fault, we will use every legal means to obtain refunds in case of overcharge.

CONCLUSION

May I conclude with a reminder that the department and the Congress are partners in the process of acquisition management. I have attempted to describe just a few of the major characteristics and objectives of the departmental acquisition organization and management for you today. However, our organization and its efforts cannot be successful unless each member of this committee and the Congress as a whole understands their purpose and potential benefit. Moreover, each Member of Congress should simultaneously consider the appropriate management role of the legislative branch in the acquisition process. Are national or parochial interests being served when Congress votes in a particular way? Is national security truly enhanced? When the Congress votes to reduce funds for a particular program, do the Members understand the cost impact for the future? Certainly, the answers to these questions vary from Member to Member. The concepts, however, are important to bear in mind lest we seek inappropriate micro solutions to problems which are truly macro in nature.

Chairman TOWER. Before we question Dr. DeLauer, let us hear from Mr. Carlucci and then we will question both of you.

STATEMENT OF HON. FRANK C. CARLUCCI III, FORMER DEPUTY SECRETARY OF DEFENSE

Mr. CARLUCCI. Thank you, Mr. Chairman.

It is a pleasure to be here. I will summarize my testimony very briefly.

Recognizing that your principal focus is organization, I must nevertheless lead off with the statement that organization is not the fundamental issue in the procurement process.

As Dr. DeLauer has indicated, the fundamental issue is stability. If we can budget to most likely cost and guarantee the stability of our programs, I think we can see many improvements in the rate at which we can field weapon systems and in the cost area.

We did look at organizational issues when we first came into the Pentagon. If you consider organization as defining lines of authority and roles of respective components and not just moving boxes around, we made some substantial changes.

Mr. Chairman, with your permission I would like to submit for the record a memo which I put out to the Secretaries and the Chairman of the Joint Chiefs and the Under Secretary and Assistant Secretaries on March 27, 1981, entitled "Management of the DOD Planning, Programing and Budgeting System."

[The memorandum follows:]

THE DEPUTY SECRETARY OF DEFENSE,
Washington, D.C., March 27, 1981.

Memorandum for Secretaries of the Military Departments, Chairman of the Joint Chiefs of Staff, Under Secretaries Defense, Assistant Secretaries of of Defense, General Counsel, and Assistants to the Secretary of Defense.

Subject: Management of the DOD Planning, Programming and Budgeting System.

On 13 February 1981, I directed a 30-day assessment of the DOD PPBS. The report was delivered to me on 13 March 1981. I have discussed it with the Steering Group, the Joint Chiefs of Staff, the Service Secretaries, the Under Secretaries and selected Assistant Secretaries. Your interest, frankness and professionalism during these discussions have convinced me that we have a unique opportunity to improve significantly the way we do our planning and manage our resources.

Based on the report and those conversations, the Secretary and I have decided on the following approach.

DOD MANAGEMENT PHILOSOPHY

The defense management system will focus on the major missions that the Department of Defense must address to satisfy national objectives:

It will define the national military strategy necessary to support our foreign policy and provide security for our people.

It will help us achieve the integrated and balanced military forces determined by the Secretary to be necessary to accomplish that strategy.

It will help assure that we are significantly ready in all aspects to deter aggression and to succeed where armed intervention is necessary.

It will provide the framework necessary to manage the Defense resources effectively and to insure successful mission accomplishment consistent with national resource limitations.

It will provide information to the Secretary to help him insure that the role of military power is properly considered in the formulation of national objectives.

DECENTRALIZATION AND ACCOUNTABILITY

We will achieve better Defense management by working toward a system of centralized control of executive policy direction and more decentralized policy execution. Working with the Service Secretaries, the Chairman of the Joint Chiefs of Staff, and OSD staff, the Secretary and I will concentrate on major policy decisions, definition of planning goals and the allocation of resoures necessary to strengthen the horizontal integration of our four Services into a balanced Armed Forces Team to meet our national military strategy. To support these policies and plans, we will hold each of the Service Secretaries responsible for the development and execution of the necessary programs and the day-to-day management of the resources under their control. Through this controlled decentralization, subordinate line executives will be held accountable for the execution of our approved programs and policy decisions. This will focus Service management efforts on improving the operational efficiency of each department.

This general principle, however, has two major corollaries. First, we must assure that accountability is specifically fixed, and that an improved process is available for DOD-wide performance evaluation and monitoring. Those who have the responsibility will be held fully accountable for results. I expect strong leadership and initiative by the civilian and military executives at all levels of the Department of Defense. They must manage well and assure that both the Secretary and I are kept informed on a continuous basis of major problems and issues before they surface in forums outside DOD.

Secondly, this concept must contain appropriate procedures and levers to assure that Department-wide, cross-Service and cross-command programs are planned, managed and evaluated. There must be sufficient flexibility to assure that Presidential and Secretary of Defense goals and priorities are recognized, met and maintained by the Services and line organizations. Examples include our nuclear forces, C³I, DOD-wide manpower policies, mobility forces and others that cut across individual Service lines.

My staff managers in the Office of the Secretary of Defense will be responsible for providing the technical cross-Service mission analysis and evaluations necessary to insure that our actions effectively integrate the capabilities of the Services. In addition, through their review of program execution within the departments, OSD staff will provide to the Secretary and me independent assessments of the success of our overall Defense efforts.

PARTICIPATIVE MANAGEMENT

A second major management principle that both the Secretary and I espouse and expect to utilize fully is that all those that have a legitimate interest in the outcome of a management decision should participate in the decision. There are many different internal points of view on major issues and legitimately so. We want to assure that these positions are fully articulated at the appropriate level. We also encourage dissent. We must all have the courage of our convictions and express them prior to the time of decision. Once the Secretary and I have made the policy decisions, however, we insist on full support in the implementation of those decisions.

This participative principle pertains not only to the OSD-Service relationship and internally within both OSD and the Services, but cross-Service as well. On the latter point, I would like more cross-Service dialogue to take place on major program development and implementation issues regardless of whether OSD staff initiates the process. The Joint Chiefs of Staff, as well as the CINCs, could initiate such dialogue. Alternatively, the Services, with their enhanced authority and responsibility, could acknowledge and move forward on DOD-wide opportunities that cut across Service lines.

ECONOMIES AND EFFICIENCIES

We all, as part of our management reponsibility, have to assure that the large amount of funds being proposed for Defense are used wisely, effectively and efficiently. We must be more aggressive and imaginative in saving money by eliminating major overlaps or duplications and assigning priorities to all programs. I look to each of you to use your enhanced authority to bring about major savings and improved methods of operation. During the programming and budgeting process, we must be straightforward with each other in looking for economies and efficiencies if our new management system is to work. I expect to enforce the necessary discipline during the entire process. Game playing will not be tolerated. We should all remember that if we do not produce some real savings and lower costs in many programs, others will do it for us.

SPECIFIC DECISIONS

In order to assure we follow the management principles and meet the policy objectives I have stated above, I am directing that the following actions take place, effective today.

IMPROVED PLANNING

I agree with the consensus that we must both improve strategic planning in the early planning phase of the PPBS cycle and strengthen long-range planning throughout the other phases of the PPBS. This calls for a more disciplined planning process. that will provide the framework, the goals and objectives, the appropriate military strategies, and the risks associated with the optimum allocation of available resources. They, in turn, should be based on military requirements that flow from a realistic assessment of near-term and long-term threats. The major issues that will arise in the programming phase and the major budgetary decisions that follow will be measured against these planning goals and threats, not only against available budgetary resources as in the past.

This improved planning process should address the larger strategic issues and problems facing the country. Resource constraints are an important part of this startegic planning activity. But we should not allow the strategic planning process to be too narrowly constrained by fiscal and program guidance. We need the correct balance to assure realistic, serious, and pragmatic strategic planning.

Therefore, to achieve this new planning policy, I direct that USD (Policy), with strong input from JCS and R&E Resource Planning, take the lead in designing this new and improved planning approach with inputs as necessary from other OSD staffs, the Services and the CINCs. I would like a detailed plan of action on how we should proceed within 30 days.

IMPROVED PROGRAMING

In accordance with this controlled decentralization principle, the Services will have enhanced responsibility for developing, defending, and carrying out their programs. OSD staffs, as I have discussed above, will concentrate more on major DOD policy, planning and program issues, primarily those that cut across Service lines and programs and those that are of priority Presidential and Secretary of Defense interest. OSD will, with help from the Services, design and plan for additional standardization, joint programs systems, to improve efficiency and reduce costs. I hope and expect the Services to join in this effort.

The OSD function becomes at the same time more difficult and more critical. OSD must help the Secretary and me manage the organization as a whole and help us identify major problems and issues in the total system in time to act.

During this immediate FY 83-87 programming phase and thereafter, all participants should be guided by the management principles enunciated above and be responsible for the following assignments:

	Lead offices	In coordination with
1. Overall Policy, Strategy, Force Planning, and Planning Guidance	USD/P	JCS, Services, CINCs, OSD (NSC).
2. Resource Objectives, Planning and Guidance	R&E, MRA&L	OSD and Services, as appropriate; Comptroller.
3. Fiscal Guidance	COMP, PA&E	OMB, White House, USD/P.
4. Program Development	Services	
5. Program Unification and Standardization	R&E	OSD.
6. Program Review and Evaluation:		
Consistency with policy	Nuclear: ISP	PA&E, R&E, COMP.
	Conv: ISA	PA&E, R&E, COMP.
Cost-effective force trade-offs, cross-Service balance and mutual support.	PA&E	USD/P, MRA&L, R&E, COMP.
Cross-program, modernization, R&D	R&E	C3I, Policy Review, COMP, other OSD as appropriate.
Readiness, sustainability, other logistics	MRA&L	USD/P, PA&E, COMP.
Manpower program feasibility and efficiency	MRA&L	USD/P, PA&E, COMP.
7. Budget Review; Cost Savings and Added Efficiencies	COMP	All of OSD, Services.

As a first task, I would like each OSD lead office to provide to me a very brief paper, in 10 days, on how it would carry out its responsibilities for these assignments. Include your suggestions on how you plan to reduce substantially the information requirement of the POM preparation instruction and the budget estimate submission. Our objective will be to develop a POM that focuses primarily on major planning and policy issues.

I am setting the goal of cutting by at least 50 percent the POM documentation requirements associated with the current cycle (POM 83). It is my understanding that the response to the FY 82 POM requirements and instructions produced in one case, 2,691 pages of text and tables. Surely we can get by with half that, particularly if we begin to follow our new management principles. ASD(PA&E) should review the FY 83-87 POM preparation instructions and provide me a recommendation in 10 days on modifications that can be made to achieve the 50 percent reduction goal.

The Services also should be streamlining their internal programming and budgeting procedures. They should focus specifically on how they will provide the OSD staff and me the essential information we need to carry out our responsibilities. At a future date, I will ask the Services for a briefing and a progress report on how well they are doing.

CHANGE OF ROLE AND MEMBERSHIP OF THE DRB

The DRB was established in April 1979 to help improve the efficiency of the PPBS, primarily by supervising the OSD review of Service POMs and the Budget Submission. I am now directing that the DRB role and membership be changed as follows:

DRB membership

Chairman: DepSecDef.
Executive Secretary: The Executive Assistant to DepSecDef.
Permanent Members: ASD (R&E).
  Chairman, JCS: ASD(HA) Associate Director/OMB.
  SecArmy: ASD (MRA&L).
  SecNavy: ASD (PA&E).
  SecAir Force: ASD (C).
  USD (P): ASD (ISA).
  USD (R&E): ASD (ISP).

Role of DRB

The primary role of DRB is to help the Secretary of Defense manage the entire revised planning, programming and budgeting process. I plan to hold regular monthly DRB meetings and more often if necessary, to review proposed planning guidance; to manage the program and budget review process; to advise the Secretary of Defense on policy, planning, program and budget issues and proposed decisions; to perform program evaluations and reviews of high priority programs on a regular basis; and to assure that major acquisition systems are more closely aligned to PPBS.

I expect a limited number of major issues to be raised before the DRB. Lesser issues should be decided outside the DRB forum by consensus between the Services and appropriate OSD staff and recorded by appropriate decision documents. In all cases, the consensus must reflect Departmental and Administration policy. Where consensus cannot be reached, the issue will be referred to the DRB. I also expect full coordination of DRB decision papers well before DRB meetings.

DRB members must be more than advocates of their particular areas of responsibility; they must take a broader and deeper DOD view and help the Secretary and me manage far better, this complex organization.

PPBS

The PPBS report on this subject concluded that the costs of implementing ZBB far outweighed the beneficial results. Examples were given of the tremendous amount of staff time and paper used with little effective value. I agree with these findings.

Therefore, I direct the Comptroller to begin the process of reducing the negative effects of the ZBB process on our PPBS beginning now with the FY 83–87 cycle. I would like a detailed plan on how we can do this effectively and with minimum dislocations for my approval within 10 days. Please coordinate the detailed proposal with OMB. The idea of reexamining the necessity and desirability of continuing each program is a good one. The process by which we have done this is not.

RATIONALIZATION OF DATA REQUIREMENTS

The move toward controlled decentralization and the assignment of more responsibility to the Services raises a number of issues on the level of detailed data formerly needed by OSD for centralized analysis and control. In keeping with this management philosophy we will have to look to the Services to maintain an adequate data bank not only to manage and execute their programs but also to keep the Secretary and OSD informed. I expect that access by OSD will be as required to resolve issues and will be freely provided by the Services. OSD will continue to maintain those centralized data banks that are mandated by statute or necessary to support the Secretary in cross-Service analysis.

The use of that data by OSD must change. OSD should exercise its access not to provide an alternative detailed analysis of Service programs but to provide the necessary joint program, cross-Service, and Secretarial priority program analysis, review and evaluation. This of course does not preclude suggesting alternatives should this be desirable; but the development and presentation of alternatives is the responsibility of line management in the first instance.

I want to assure we have a better definition of this complex issue on level of detail, data banks and categorical formats. In addition, I want to reduce further the paperwork in the PPBS and to begin to rationalize the usage of the many varieties of categories and data bases required internally and externally.

To do this, I direct that a study be mounted to develop a more consistent framework of data bases and to reduce the level of data required among OSD and the Services. An inter-OSD-Service team led by the Comptroller as chairman should do an in-depth problem analysis and array options for cutting down the massive data requirements. Please include the OMB and legislative requirements. I expect this report in 30 days.

TRANSITION FISCAL YEARS 1983–87

We should begin to move toward the improved PPBS immediately. I direct USD (Policy) to prepare draft FY 1983–87 policy guidance, PA&E and Comptroller to prepare draft fiscal guidance and USD (R&E) and MRA&L to prepare draft resource objectives and planning guidance within 10 days. USD (Policy) should take the overall lead to pull the entire draft policy guidance package together and distribute it for review to all appropriate OSD and Service staffs. I then expect to hold the first meeting of the newly reconstituted DRB to review and approve the draft policy and fiscal guidance.

I expect a significantly reduced POM to be prepared by the Services by 15 June 1981.

The Secretary and I, in consultation with the Director of OMB, have decided that the joint OMB/OSD budget review will be continued. The precise form and nature of this review will be developed with OMB in the next several weeks.

I will regularly review progress toward achieving this new revised PPBS. As we go through the FY 83 process and begin the FY 84 planning, I will keep open the options of a biennial POM and combined program-budget review in the next cycle. Much will depend on our progress this year.

DOD PERFORMANCE REVIEW PROCESS

The Secretary and I will soon be instituting a strong management review process through which goals, objectives, and milestones will be established and regularly reviewed by the Secretary and me for each major program.

I appreciatae the time and interest you have provided during this review. Achieving the goals the Secretary and I have set will not be easy and will take time. The Secretary and I expect and know we will receive your full cooperation and your personal leadership over time to achieve our joint overall objective of revitalizing American military strength.

FRANK C. CARLUCCI.

Mr. CARLUCCI. The purpose of that memo was to define roles and lines of authority. I would just quote from two sentences in that memo:

> We will achieve better defense management by working toward a system of centralized control of executive policy direction and more decentralized policy execution.
>
> In accordance with this decontrolled decentralization principle, the services will have enhanced responsibilities for developing, defending and carrying out their programs. OSD staffs will concentrate more on major DOD policy, planning and program issues, primarily those that cut across service lines and programs and those that are of priority Presidential and Secretary of Defense interest.

I think that statement addresses one of the issues that has been of concern to the committee.

In addition to putting out this guidance, we upgraded the Defense Resources Board, as Dr. DeLauer has indicated. When I first came into office it was a rather low-ranking ad hoc body. We put the service Chiefs and the service Secretaries on it and we made it a participatory management mechanism of the Department of Defense. That group looked at the process from strategy to acquisition.

In addition, we linked the DSARC process and PPBS process because, in my judgment, that was one of the principal defects when we came to office. That is to say, the DSARC process could go on independently without any relationship to budget levels. That situation has now been corrected.

Dr. DeLauer mentioned the 32 initiatives. He, like many others, attached my name to them. I would like to emphasize that I do not consider that particularly appropriate because these initiatives really were the result of an intensive effort by a great number of people in the Department of Defense and outside of DOD.

We took suggestions from every quarter. We testified extensively on the initiatives. The reception in Congress was enthusiastic and judging by the most recent SAR, I at least would like to think that there has been some progress.

I should point out that nowhere in preparing these initiatives was organization raised as a principal problem.

You have a number of specific questions which I have answered in my prepared testimony relating to the different organizational components.

I think it would be unhealthy to split up OUSDR&E. One talks about the management span and control of people like Dr. DeLauer, but let us also worry about the span and control of the Secretary and Deputy Secretary. If you split up DR&E, you are going to complicate the mission of the Deputy Secretary.

In summary, Mr. Chairman, if we can have multiyear procurement of multiyear budgeting, economic rates budgeting to most likely cost and stability, we can save enormous amounts of money in the defense budget; without this, reorganization may indeed be more disruptive than productive.

I think we have the elements of a good program in the initiatives. The Congress has endorsed them. I would urge that we continue to move forward with these initiatives and not look for panaceas because there are none.

Thank you very much, Mr. Chairman.

[The prepared statement of Mr. Carlucci follows:]

PREPARED STATEMENT BY FRANK C. CARLUCCI, THE FORMER DEPUTY SECRETARY OF DEFENSE

Mr. Chairman, members of the committee, I appreciate the opportunity to meet with you today. As I understand it, your principal interest in these hearings is to identify organizational impediments in the Department of Defense which unduly impair the efficiency of the DOD acquisition process—focusing on organization considerations and the decisionmaking process.

Let me be very direct. I don't believe that the fundamental problem in the DOD acquisition process is an organizational one. The single, most important key to improvement in the acquisition process in the future is program stability. Following a close second and third are two other management factors: Instilling discipline in the system to hold costs down, and establishing incentives which stress and reward good acquisition practices.

The administration and the Congress share the responsibility for program stability and discipline in equal parts. Without this basic underpinning in the acquisition process, setting goals and incentives for good performance by our acquisition work force is almost fruitless. All the organizational changes in the world won't do any good until we effectively address the more systematic faults in the acquisition process.

Not that we should ignore organization, of course. When Secretary Weinberger and I came to the Pentagon, we found decisionmaking was highly centralized and we did address some of the concerns you have expressed. The first thing that we did was to streamline the process and better define the respective roles of the OSD staff and the services. We instituted a controlled decentralization process where the services had the responsibility for formulating recommendations to us. The OSD staff functioned as a "staff," not as a line organization, in evaluating those recommendations. The services then implemented the decisions. The vehicle through which we chose to do this was the Defense Resources Board, which was a rather low-level ad hoc group when we came into office. We formalized and upgraded it by putting the service secretaries and service chiefs on it, as well as the appropriate OSD under and assistant secretaries. This I submit was a major reorganization, at least in terms of its impact on the process.

At the same time, we expanded the sources of military advice available to the DRB. For the first time, the unified and specified commanders [CINCS] were called in from all over the world to give DRB their views. These sessions were particularly stimulating.

In the past, weapon system acquisition decisions and budget decisions were not always well coordinated. We made a major effort to improve the coordination of the PPBS process with the weapons acquisition system and the defense systems acquisition review council [DSARC]—the second most important decisionmaking system in the DOD.

Hand and glove with the decisionmaking and budgeting restructure, we gave the procurement process the biggest scrub down since David Packard issued DOD directive 5000.1 over ten years ago. The result was the 32 initiatives which in some circles, inappropriately, bear my name. Those initiatives did not come from me. They did not come from some outside task force. Instead, we assembled the best experts we had on these programs from within, and asked them what was wrong. When the recommendations were developed, everybody, both in the department and on the Hill said, "right on." The point is important because both DOD and the Hill examined the issue at the time and nobody argued seriously that a major reorganization could help. All indicators pointed to other solutions, and we adopted them.

Let me now try to address some of your specific questions in the context I have just described.

(1) Is the role of the Office of the Under Secretary of Defense for Research and Engineering [OUSDR&E] in the procurement process appropriate?

I think the role of OUSDR&E is appropriate. I always found them responsive.

(2) Is the DSARC an effective decisionmaking body?

The DSARC does function effectively. I like to think that the 32 initiatives, one of which streamlined the DSARC process, helped.

(3) Does OSD micro-manage procurement decisions?

OSD does have a tendency to micro-manage procurement. But there need to be constraints on the services. The issue is one of balance. As I have described, we tried to define roles so that OSD and the services functioned as staff and line organizations, respectively. I think this has been helpful.

(4) Has OSD adequately defined the linkage between national objectives/strategy and acquisition decisions?

The defense guidance was explicitly changed to provide a tighter link between strategy and acquistion decisions. This was the major focus of the DRB January sessions.

(5) Does the Office of Acquisition Management play a proper and sufficient role in the formulation of acquisition strategy?

I certainly depended heavily on the Office of Acquisition Management, and found that they responded superbly. It is important that they be given clear goals from one source, and not be torn in a dozen different directions.

(6) Does OSD possess sufficient oversight authority to insure the successful development of joint service programs?

OSD does have sufficient oversight authority on joint programs if the Deputy Secretary supports them. The problem is not internal management of organization but congressional end runs by the services.

SERVICE CONSIDERATIONS

The services need to have the initiative on procurement decisions subject to OSD policy and budget definition. The process simply cannot be micro-managed centrally unless we go to a "purple suit" concept. Operational needs can only be defined by the services, but the unified commands can and are playing an increasing role. Service decisions are generally responsive to OSD requirements although some game playing does go on.

PROCESS/POLICY CONSIDERATIONS

I can think of no organizational adjustment to avoid buying in. Buying in is a result of budget instability and the reluctance of both the Congress and the DOD to kill programs or add funds to support reasonable estimates. DOD in recent years has made progress but we probably should have killed more programs than we did and added more funds to others. The independent cost analysis [ICA] process, controversial as it is, has been helpful, as has been our emphasis on budgeting to most likely cost. Both are significant innovations. The Congress, on the other hand may be engaging in a massive buy in by shaving program after program while killing none. This clearly is not an organizational issue.

One of the 32 initiatives was directed at simplifying regulations. We need congressional support on this point. The present obsession with forcing competition on every situation whether appropriate or not, is a good example of how complicated regulations which impede sensible procurement practices can spring up.

Finally, you asked which office has the responsibility for considering the procurement of common equipment. OSD establishes the policy—specifically. Dr. DeLauer and his staff have a DOD directive on the subject, and it is also stressed in the 32 initiatives. The military departments are responsible for actually accomplishing the standardization. This is generally done through joint service committees such as the one we have in the avionics area. We can always do more. Standardization is a continuing job.

Give me multi-year, economic rates, and budgeting to most likely cost and I can guarantee savings with any organizational structure. The issue traces right back to budget stability. With that stability, we estimated we could save about $20 billion over a five-year period. Without it, moving organizational blocks around in OSD will accomplish little. Indeed any reorganization carries a high price in terms of time lost working job descriptions, adjusting to new relationships, and sorting out personnel issues. The cost benefit ratio is frequently high.

Allow me one metaphor. Coach Lombardi believed in two key principles: First, keep the basics in mind always * * * "blocking and tackling," and secondly, discipline applies to every member of the team. What is really needed now is to stress the fundamentals, and stress them long and hard—until they take! Organization quite frankly is not a fundamental at this point. If we succeed in dealing with the fundamentals then reorganization might be icing on the cake; otherwise it will be part of the problem rather than the solution.

I know that Secretary Weinberger, Paul Thayer, Dick DeLauer, and service decisionmakers are committed to effective procurement at the least cost. This should be a unifying objective between DOD and the Congress. DOD has taken a hard look at its procedures and introduced many reforms. While more progress is always possible, the direction is sound. I would hope the Congress could adopt a supportive role and examine its own procedures rather than engage in search for panaceas, for there are none.

I would be pleased to answer any questions.

Chairman TOWER. Thank you, Mr. Carlucci.

Let me ask you both to comment on this, particularly you, Dr. DeLauer.

Should a single office have responsibility for both acquisition as well as research and engineering? Does this produce conflicts of interest? Does this militate against objectivity?

Dr. DELAUER. The answer to the last portion of that question, Mr. Chairman, is no. To a certain extent, research, development, test, and evaluation is a subset of acquisition.

So, even during that period of time, you are doing the job of research and development. You are in a sense setting the acquisition course and you just don't separate the two.

As a matter of fact, if you add manufacturing, which we intend to do, as I mentioned in my remarks; research, development, test, evaluation, and manufacturing is indeed acquisition.

The only things that are left are operation, evaluation, deployment, logistic support, and training and those are indeed the responsibility of other parts of the Department.

But the concept of support all should be considered during the acquisition process.

The short answer is no. As a matter of fact, I think you would insist that RDT&E is part of the acquisition process and that the fellow responsible should also be held accountable for the acquisition process as a whole.

Chairman TOWER. Mr. Carlucci, in retrospect, do you have any comment on that?

Mr. CARLUCCI. Mr. Chairman, if the issue is one of span and control, I have addressed that.

If the issue is one of checks and balances on activities of DTR&E, I think there are sufficient checks. There is the CAIG mechanism. There is the role of PA&E.

We instituted a couple of years ago an independent cost estimating system at the service level where the burden is on the service Secretary. If he wants to depart from that independent cost mechanism, there is a participatory management mechanism of the DSARC. Then there is the Defense Resources Board itself.

So, the acquisition decisions made by the acquisition manager are subject to fairly intensive review. I would endorse the concept of keeping research and acquisition together.

Chairman TOWER. Does the current structure properly balance the interest of procurement and readiness? Would it be better to combine acquisition responsibility with readiness existing in a separate office charged with force management?

Dr. DELAUER. I would like to address that, Mr. Chairman, if I may.

To create the impression or even suggest that the readiness issue is one that is really acceptable from the nature of the product would be not understanding what we have to do. Readiness as a rule——

Chairman TOWER. I do understand it, Doctor.

Dr. DELAUER. You do understand it? I am speaking for the record.

Chairman TOWER. A function of modernization is readiness.

Dr. DELAUER. That is right. But the readiness function really comes down to the amount of resources allocated to that particular segment of the defense budget. That is done at the DRB. That is not done independently by any particular executive.

Now, the level of readiness has to be matched to the force structure and to the defense guidance. Where all those pieces come together is in the DRB when we decide how we are going to allocate our resources.

To a certain extent all of us are responsible for readiness. Certain executives, particularly the Assistant Secretary, handle the implementation of the details of logistics support which are the basis of much of our readiness. The force structure is really handled by the Secretary, the Chairman, and the services. Between logistics support and force structure you have military readiness.

Chairman TOWER. Mr. Carlucci, do you have a comment on that?

Mr. CARLUCCI. Yes.

I would just observe that the debate on the trade-off between readiness and sustainability and weapon systems is one of the most intense debates that takes place in the DRB process.

The Assistant Secretary for Manpower, Reserve Affairs and Logistics plays a very critical role in that debate. He, in effect, has functioned as the advocate for readiness and sustainability, although Dr. DeLauer, of course, as he pointed out, does support readiness and sustainability as part of the whole force modernization program.

The decisions will always be tough ones and there is no easy solution. The current organization structure at least brings the issues to the surface in the DRB. I would not say the organizational structure is perfect by any means.

Manpower Reserve Affairs and Logistics is a very collective organization, but I can't off the top of my head give you any recommendations as to how you might make that more cohesive.

Chairman TOWER. What efforts are being made, Dr. DeLauer, to insure that acquisition proposals are designed on the lowest overall program cost and not just the lowest front end cost?

Dr. DELAUER. That problem has always been with us and it is not an easy problem to solve.

One way that we are attacking the problem is that we are looking at total program costs through independent cost evaluation. An organization that is part of program, analysis and evaluation, the CAIG, perfoms these evaluations and they are good.

I can state without any hesitation that the independent cost analysts of the Department of Defense and of the services themselves can do a credible job in telling you whether program costs, based on what the program objectives are, are pretty close to what it is going to cost.

The big uncertainty in many cases is the inventory objective, on the one hand, and, as we kept pointing out to everybody, the inflation rate.

Knowing those two items, the unit cost is pretty well pinned down in constant dollars by independent cost estimates.

What do we do in the DSARC process? We will not leave that room until the independent cost people make the assessment whether or not the services program manager's costs are indeed consistent with that independent estimate.

Chairman TOWER. Let me add one other factor in there: In addition to the acquisition cost of the program, the organization and maintenance cost associated with it.

Dr. DELAUER. That is right, sir. They have a reasonably good handle on what it takes to support a system in the field if the system is designed and produced according to the specification laid down.

Therein lies part of the problem that I referred to in my opening statement in regard to attempting to assess both inventory objectives at the end point as well as the ability for the system to be able to meet its specified objectives.

If you get that too far ahead of you, you can make mistakes in regard to what that estimate will be.

Our OSD people work very closely with the services. The question of supportability is always the No. 1 issue that is talked about during the DSARC process, particularly early in the game when we are figuring out whether or not we should start a program.

Chairman TOWER. As you know, this committee, and you have mentioned it in your statement, supported the concept of multiyear funding. I am trying to look at that critically.

• To what extent would multiyear funding reduce your leverage over the contractor? Or would it have any impact on the leverage that you have on the contractor to keep costs down?

Dr. **DeLauer**. I think the leverage of the Department of Defense being a monopsony over contractors is very considerable in the long term, in the overall view. Performance that is proper is the best way to get the next job.

Now, the way you gain leverage is the way that the contract is written. Write the contract in the proper way and you get control over the contract.

You write it sloppily, loosely, lots of opportunities for misinterpretation or ambiguities will lead you into problems, whether it is 1 year or multiyear.

The real advantage of the multiyear program is not so much control of the contractor as it is the ability to be able to buy in an economical fashion at the most economical way.

I think you are finding the one that is the most successful one right now has been the B-1.

Mr. **Carlucci**. If I may add a comment on multiyear, Mr. Chairman. Multiyear introduces stability into the process.

It reduces the tendency for the buy-in. The greatest incentive to buy in is when you know you don't have enough money available.

Let me also comment that I think that the independent cost analysis process is working well and I think it has now been institutionalized in DOD.

Further, let me point out that initiative No. 9 of the original 32 initiatives mandated that readiness objectives be established for each development program to include estimates for readiness level to be achieved at an earlier fielding and maturity.

So, that was a part of the original program.

Chairman **Tower**. Thank you, gentleman. My time has expired. Senator Nunn?

Senator **Nunn**. Thank you, Mr. Chairman.

I am glad to have both of you here this morning. I welcome you back, Mr. Carlucci, we are glad to have you.

Dr. DeLauer, Senator Pryor has asked me to raise a question with you about the director of the operation, testing and evaluation establishment. That was a change made last year, effective November 1, 1983.

Do you have any report that you can bring us today as to the status of that legislative mandate?

Dr. **DeLauer**. Yes, sir.

The Deputy Assistant Secretary for Administration has prepared and submitted to the Secretary a recommended organizational structure to implement the new legislation to establish a Director of Operational Test and Evaluation, including the level of manpower necessary to do that job.

The Secretary had some questions is his mind about the organization, its size, and who will be nominated to temporarily direct the organization until we can go outside and do the recruiting.

As you remember, the legislation implies that a director be chosen from outside of the department, and the Secretary has some questions about that. He and I are meeting at 3 p.m. this afternoon. I hope we can answer the question at 3 o'clock, if that is the case, and we will sign a letter saying here is what we will do.

Senator **Nunn**. When you get the implementing instructions firmed up, will you furnish a copy for the record?

Dr. **DeLauer**. Absolutely. As a matter of fact, you can come over and we will brief those who are interested.

[The information follows:]

THE SECRETARY OF DEFENSE,
Washington, D.C., November 29, 1983.

Memorandum for Secretaries of the Military Departments, Chairman of the Joint Chiefs of Staff, Under Secretaries of Defense, Assistant Secretaries of Defense, General Counsel, Inspector General, Assistants to the Secretary of Defense, Directors of the Defense Agencies.

Subject: Director of Operational Test and Evaluation.

P.L. 98-94, the Department of Defense Authorization Act of fiscal year 1984, dated September 24, 1983, established the position of Director of Operational Test and Evaluation with responsibility to serve as the principal adviser to the Secretary of Defense on operational test and evaluation and as the principal operational test and evaluation official within the Department of Defense. The act further stipulates that this official is to report directly, without intervening review or approval, to the Secretary of Defense. Accordingly, I have directed that action be undertaken to establish a Directorate for Operational Test and Evaluation as an independent office within the Office of the Secretary of Defense.

The DASD (Administration), in cooperation with the USD (Research and Engineering), will coordinate the establishment of this new organization, develop a charter for the Directorate for Operational Test and Evaluation and revise the charter of the OUSD (Research and Engineering) to reflect any collateral changes which may be required by these actions.

Dr. Isham W. Linder, Director of Defense Test and Evaluation, OUSD (Reserach and Engineering), will temporarily oversee the operation of the Directorate for Operational Test and Evaluation pending the confirmation and appointment of a director.

PAUL THAYER,
Deputy Secretary of Defense.

Senator **Nunn**. You notice I did not say how enthusiastic you were?

Dr. **DeLauer**. Thank you very much.

Senator **Nunn**. On page 4 you mentioned thousands of additional manhours that are now being required by the unit cost provision.

Did you figure in that how many manhours were reduced by going to a 1-year SAR report rather than quarterly?

Dr. **DeLauer**. I don't think so. Let me ask my brains.

Senator **Nunn**. My understanding was that what the defense panel was trying to do was make reduction in the overall reporting and cut it down.

I know there were some increases, but I am trying to get at the net.

Dr. **DeLauer**. There is no question that 1 year reporting helps and you and I have discussed that. As you know, in the past the practice has been that the three subsequent ones after the first one were more of an update.

The first one is the one that takes all the effort because it has to match the new budget against what we are going to do. Those are where the bulk of the reports and efforts are done.

There is no question we will get some help out of the updating.

Senator **Nunn**. I though there was tremendous savings in going to once a year rather than quarterly.

Dr. **DeLauer**. Yes, but the fact is that we have more programs. No question we are saving effort since we don't have to update the SAR quarterly, but we have added so many line items.

Senator **Nunn**. I understand you have added some programs. But your testimony has not been in reference to the overall. It has been strictly to the add-ons.

Dr. **DeLauer**. Add-ons. As a matter of fact, we have asked for relief in many cases and the Congress has been more than cooperative in giving us the relief of not adding certain major programs until we get information at a later date.

Senator **Nunn**. I would like you, if you could, to give us an assessment of what we have cut down as well as what we have increased.

Dr. **DeLauer**. All right, we will do that.

Chairman **Tower**. How many manhours will it take to figure that out?

Senator **Nunn**. I don't know.

Dr. **DeLauer**. It is a vicious circle. We will give you that.

[The information follows:]

Before changes to section 139a of title 10 of United States Code were enacted by the Defense Authorization Act of 1983, the selected acquisition reporting system on the average contained 48 reports. The preparation and review of these selected acquisition reports four times per year required approximately 37,500 manhours by the Department of Defense. Although section 139a made three of the four quarters per year exception reporting, the law required reporting on a greater number of programs. For the quarter ending December 31, 1983, 96 reports will be required—a 100 percent increase. The combined effect of reporting on all these programs once per year and on a projected number of 106 exception reports for the balance of the year (based on our experience of 53 exception reports during fiscal year 1983) will require about 39,200 manhours during fiscal year 1984.

In addition, unit cost reporting on these 96 programs will require about 19,000 manhours of preparation and review time during fiscal year 1984. In sum, the changes to the reporting requirements result in a increase of about 21,000 manhours or about 12 manyears.

Senator **Nunn**. As You know, Secretary Marsh of the Army and Secretary Lehman of the Navy testified that unit cost has provided them with a vitally needed management tool. They have been able to get their own oversight greatly improved on unit cost growth because of the amendment.

Do you disagree with that?

Dr. **DeLauer**. Not a bit. The unit cost addition is positive. As I stated in my remarks before you arrived, Senator, it is not the SAR itself that is causing me a problem, it is not even the number of programs; it is the extended period in which everybody wants to be not only absolutely precise, but accurate.

You and I have discussed it. In the past you said you have been receptive to having a 5-year SAR with greater accuracy than a 15-year SAR. There can be great inaccuracies when you take the unit cost and multiply by some inventory objective way out in the future.

We are still continuing that dialogue.

Senator **Nunn**. I hope you do. I am not locked in. As far as I am concerned, it is a continuing effort to get it to the point where it makes the most sense. I am willing to listen to any kind of reason.

Dr. **DeLauer**. John Lehman and I are very close together on the 5-year SAR.

Senator COHEN. So is the Deputy Secretary.

Dr. DELAUER. We have a little problem with some other people, but that is a different subject.

Senator NUNN. Dr. DeLauer, is it your organization that will be charged with the responsibility of actually sitting down periodically and backing away from current problems and things?

What can we do to improve the system? I know that Secretary Carlucci did that when he came in and I know you have done it from time to time, but is there anybody in the Department of Defense charged with that responsibility to back off on the day-to-day problems and putting out first and saying what is wrong with the system and how can we improve it?

Is any organization responsible?

Dr. DELAUER. From an acquisition standpoint, there is no question that we do that in a reasonable way with the acquisition policy group that we have.

When it comes to a question of broad conceptual kind of planning—this is my personal opinion—I think we are missing that capability in the Department.

Senator NUNN. What would you do to create that capability? Would it take new people or would it be just designating the people to carry out that program?

Dr. DELAUER. I think it would take not necessarily new people, but people with a different functional approach. The heart of the problem of that sort of thing is the input from the military side of the Department.

That is the Joint Staff, the Chairman and Joint Chiefs of Staff and its staff. That organization is organized in a way that is for operations.

The things you want to do and are talking about is how do I do broader planning and see how these things interact if I change the way we are doing business?

From that side of the fence there is no way that they can give you that kind of answer.

I will tell you what I am doing about this, since I tend to be the overseer of IDA.

Senator NUNN. Of what?

Dr. DELAUER. Institute of Defense Analysis, one of the contract research centers right here in town.

General Goodpastor is the president. He and the Chairman have been sitting down discussing how we can provide to the Chairman and to the staff a better concept formulation and analysis capability. Using the resources of IDA we can help him do those sorts of jobs, particularly for a subject close to your heart, conventional war in Europe.

We are now getting munitions that don't miss. We are getting platforms that you can't observe electronically. We have command and control systems and sensors that can use data in real time. We are getting to the point where we can disseminate information in real time for battle management.

How does that affect force structure? How should we allocate our resources? This is pretty much a military problem, not a civilian problem.

To get that kind of answer out of the present system is almost impossible.

Senator NUNN. That is where you run into the problems in joint procurement.

Dr. DELAUER. Yes, sir.

Senator NUNN. In other words, until you can sort out the roles and missions and all of those things, it is awful hard to come to grips with this new technology; is that right?

Dr. DELAUER. That is right. Joint programs are the next level down. There we are making a step in the right direction.

Senator NUNN. Before we leave that, and then I want to get into the program, what would you do to correct that problem?

You say the military can't get a handle on that. How should they be organized or is that an organizational problem?

Dr. DELAUER. As Frank pointed out earlier, you can organize for one set of circumstances and it may not match the other.

I think in the case of the long-range planning for the military side of DOD, which is the responsibility of the Chairman and Joint Chiefs, they need some additional capability to be able to address the problems in a technical and economic sense.

What makes sense: What are the force levels needed? what are the attrition rates you might have?

And that is best done by providing them support that exists right here town. It is just a matter of focusing on their shop.

Senator NUNN. Getting that kind of capability, the economic trade-off, those kinds of judgments, into the Joint Staff, is that what you are saying?

Dr. DELAUER. That is right. So that the Chairman can cover those with the Chiefs and they can report to the Secretary and say, "Hey, look, here is an initiative we think we ought to pursue."

Senator NUNN. Are you saying not a whole lot more military people over there, but outside civilian type expertise finding its why into that joint systems so that it can then become part of the military analysis?

Dr. DELAUER. And they have to feel that they are responding to their own organization, and not being imposed from alone by us, R&E, PA&E, or not being imposed from the side by the service.

Senator NUNN. You say basically the fundamental problems that affect our ability to really defend, let us say, NATO conventionally and some of the basic decisions that have to be made about new concepts, tactics, new defense capabilities, technologically speaking, they are simply beyond the capability of the Joint Staff now to be able to handle?

Dr. DELAUER. And to do the job that the Joint Staff is supposed to do, to handle operations. You know, they have to carry it on both shoulders.

Frank might be able to add something to that.

Mr. CARLUCCI. I think that is right. As our programs become more technologically complex, the Joint Staff does need an added capability. I see that as somewhat different, though, then the long-rang acquisition planning that you talked about, Senator Nunn, and I think you raise a very valid point on long-range acquisition planning.

There is no real focal point in DOD for it. You have to be very careful that you don't create an office that competes with the Office of Acquisition Policy.

In a sense I did some of that out of my office through a special assistant, not that he did the think tank kind of planning, himself, but he was able to pull people together on some of the longer-range problems.

You also have some capability in PA&E. That could be beefed up. It has never been deliberately used, at least wasn't during my tenure, for long-range planning purpose.

Senator NUNN. My time has expired. I want to come back on the joint program.

Chairman TOWER. Senator Cohen?

Senator COHEN. Thank you.

Today really is one of a continuation of hearings on the reorganizaion of the Department of Defense. It has been my experience here that we have a number of departments constantly trying to organize and they never seem to be quite organized until we undertake the process again.

Our next witness, Norm Augustine, has written a book called "Augustine's Laws" in which he said:

> We trained hard. But it seemed that every time we were beginning to form up a team, we would be reorganized.
>
> I was to learn later in life that we tend to meet any new situation by reorganizing.

I don't think that has affected the Department of Defense since the last full-scale reorganization that was attempted in 1958. That is what the Chairman is trying to oversee right now.

I would like to know about joint service programs. All of the information I received is that there is very little incentive for the services to want to participate in those. There is a lot of conflict and competition. There is a great deal of delay and quite a bit of expense.

I believe Secretary Ambrose, among others, is perhaps recommending that we ought not to have joint service programs, but to delegate the responsibility to one service to come up with a system that would apply to uses for both.

What do you think about that?

~~Dr.~~ DELAUER. When you talk to Jim Ambrose, by definition he doesn't like joint programs.

Senator COHEN. Do you like joint programs?

Dr. DELAUER. I don't like to be the boss of them because they are a royal pain, but I think it is absolutely required if we are going to get the most out of our dollar.

Senator COHEN. The testimony is that we are getting the least out of our dollar.

Dr. DELAUER. I am not so sure about that.

I think one of the things Paul Thayer has finally communicated to the people is, "Look, we are not going to be able to have an optimum solution for everybody's requirements. What we intend to do on some of these joint programs is to have the best solution for the Department of Defense." That is the message.

This summer I had the Defense Science Board study group under Admiral Kidd, who ran the Materiel Command for the Navy and

General DePuy who came from the Army side give us some recommendations on how to run joint programs.

Naturally they argued that it should have a greater service influence at the beginning of the program and suggested a process to do that.

We are now in the process of taking a new joint program and using it as a test case of their recommendation. That recommendation is available to you, Senator, and I will get it to you from the Defense Science Board.

It is getting the services involved to settle down on some criteria.

Jim Ambrose has a point that one service managing the effort is much more efficient than having a multiservice management of the thing.

So, if we can indeed find a way to assign it to a particular service and make them stick to it, I think there will be progress.

Now, the one that is on the forefront in this way is JVX. In the DRB this time there was an argument with the Army in the middle over whether the Army should participate in the JVX program.

The Navy is going to do it for the Marine Corps. Once we have a commitment out of the Air Force and the Army on the utilization of that aircraft, when developed to a certain level of numbers which will permit us to put a program together, then we will let the Navy for the Marine Corps do its job and the other ones will have to go along.

I think that is the kind of approach we will have to take. We did this on the F-4. The F-4 was done for the Navy and the Air Force took it up.

We had the same thing on the helicopter, Black Hawk. The Army did the Black Hawk and the Air Force picked it up.

We have a lot of examples where it has worked. It has worked in some cases where they have caught on after the conceptual phase, and that is where we are rapping now.

Senator COHEN. We have had a number of hearings dealing with costs of spare parts, for example, and excessive overcharges. Norm Augustine will point out that one major contractor had as many as 10,000 subcontractors to contend with in putting together a major weapon system. It is sort of a value added system.

You start out with a small cost for a particular item. By the time it goes through several subcontractors and the major contractor, you have a large cost.

In addition to that, we had Joseph Sherick, Inspector General, who recently testified that this is essentially a people problem. The point he is trying to make is that we don't have the people really qualified to deal with these contractors. They tend to be either a full colonel or perhaps a one star general. They don't have the background in management. They don't have the background in negotiations. They don't have the skills for dealing with contractors.

To compound that problem, they are rotated out in 1 or 2 or 3 years, so they never finish the weapons system itself as program manager for their Government.

All of this results in a lot of waste and abuse, in my judgment. Perhaps this is one sort of reorganization we might take a look at in terms of policy about rotating program managers and about training of those program managers to deal with contractors in a field they are not qualified to deal in right now.

Dr. **DeLauer**. I think you have a point.

Mr. **Carlucci**. May I comment on this?

I was looking for the exact citation, but that was one part of the original 32-point program. I don't think it has been implemented very well. I think your point is well taken.

Dr. **DeLauer**. Yes.

Senator **Cohen**. Let me ask you one other question about the independent estimates. Senator Tower asked you whether an analysis was done, not in terms of finding up-front cost, but rather the full-term cost.

There has been, in the past, some discrepancy between the DSARC process or analysis and that of the CAIG. You may have heard me from time to time pound the table and say we would like to have a look at those CAIG's to see why it is there seems historically to be a better projection of actual cost being done by the independent analysis than by the DSARC process.

What is your testimony on that? Why is that so?

Dr. **DeLauer**. Let me tell you what the actual process is in this case.

When we have a DSARC review in the program, sitting about where you are sitting, Senator Cohen, is Milt Margolis. I ask him after the program review—I am the Chairman of the DSARC—I look to him and I say, "Now you give me your views of costs that were presented."

Step by step he tells exactly where, in his view, they are consistent with their estimate, where they are inconsistent, what they have not done, and what has to be done. We don't leave the place until it is an action item that they get together and adjudicate that.

Then I get a report back that they have indeed adjudicated it.

In many cases we don't have what many of you in Congress would like to see, a big report that says here is the CAIG's telephone directory about the cost and here is the program manager's telephone directory about the cost, now let us see where they differ. The process does not really work in exactly that sort of way.

It is a constant review, it is not a mail slot operation. They are working with the program people. They all are of the same professional class.

Senator **Cohen**. How do you explain the fact that the CAIG appears to be more in line with the actual cost than DSARC?

Dr. **DeLauer**. The CAIG takes part in the DSARC. The dichotomy occurs between the CAIG and the program managers of the service.

Mr. **Carlucci**. There is a tendency on the part of the program manager to buy in particularly in a time of downward budget pressure.

Indeed, I am fearful that we are going to go through a repetition of some of the cost overruns in a couple of years because of the shaving of programs that is taking place here on the Hill, both this year and last year.

Dr. DeLauer. You know, the remedy at the present time now is to cut programs out. As costs go up, we are going to cut programs and we have cut programs out.

Senator Cohen. Mr. Carlucci testified a couple years ago, that we have too many weapon systems—a general conclusion that we all shared.

Dr. DeLauer. That is right.

Mr. Carlucci. Yes.

Senator Cohen. I maintain that by the time it gets here, it is too late. By the time the process comes here—and you are concerned, Dr. DeLauer, about Congress getting a line item budget and micromanaging the Defense Department—I would maintain that it is too late to stop the weapon system.

If you are going to stop the system, you have to do it before it gets started. That has not been done in the past because of what you have suggested, too many people start buying it.

They start and then they have a contractor who then has employees. The employees have wives and families who happen to vote, who live in a Senator's or Congressman's district. Suddenly you have a constituency out there.

I don't know anybody on this committee or in the Congress in both Houses that is going around campaigning about cutting jobs out of his district. I maintain you have to stop those systems before they ever get here.

Mr. Carlucci. May I comment on that?

Senator Cohen. Yes.

Mr. Carlucci. We tried to do that. In fact, I find it amusing to read some articles in newspapers that the Defense Department only kills small systems, systems in the R&D phase.

That is exactly when you should kill a system, before it builds a constituency. I recognize it is very difficult to kill programs on the Hill. Don't forget when you put the defense budget together, you are putting it together in the context of a President's mark, so you can only get a certain number of programs in that mark.

If the Congress then decides to cut below that mark, it is the obligation of Congress to cut programs and not just shave them. Indeed, one of my concerns is that the overall add-on, the Reagan add-on, to the Carter defense budget over a 5-year period was $116 billion. That add-on right now is probably, depending on where you come out on the Hill, in the neighborhood of $40 to $50 billion. Yet there have not been that many programs cut.

Unless you hit readiness and sustainability, a rash of cost overruns 3 or 4 years from now is almost inevitable.

Senator Cohen. Thank you. My time has expired.

Senator Nunn. Let me say for the record I agree with you completely. You are right.

Senator Cohen [presiding]. Senator Kennedy?

Senator Kennedy. Let me start where Mr. Carlucci left off.

There has been a general recommendation by the Congress through the budget process of 5-percent real growth in terms of defense.

There have been reports now in the Wall Street Journal and other newspapers that the requests that are going to be made of the Congress next year amount to some figure, about $322 billion.

I can remember the early periods of this committee's deliberation on how we were going to respond to the first budget resolution of a 5-percent real growth and the members of this committee on both sides of the aisle asking the DOD, asking both the civilian as well as the military about their areas of priorities.

You have given us some recommendations here today about things that can be done to make the system more effective and more efficient in your budget cycles in terms of procurement.

But how in the world are we going to be able to prioritize these various kinds of weapon systems when we get absolutely no response, reaction, recommendation, or suggestion from those that have the information within the DOD or within the Chiefs about what the priorities are and where they lie?

Mr. CARLUCCI. Senator Kennedy, DOD does go through a prioritization process of sorts in the DRB sessions. That is what putting the President's budget together is basically about.

So, you are not talking about a lack of priorities in DOD. You are talking about who should bear the burden of establishing priorities when the Congress decides to cut the budget.

DOD is certainly willing to furnish background information, information on why particular weapon systems are desirable, why a certain level of readiness and sustainability is essential.

But if the Congress is going to reshape the budget, it seems to me that the Congress is then setting its priorities and the burden of doing that should not be put off on the Department of Defense.

Senator KENNEDY. What we are saying is that we have a certain amount of resources to deal with the security interests of the United States, they should fit within a certain overall kind of figure and growth pattern.

Why is there reluctance to work not in an adversarial way, but in a cooperative way with the Congress in terms of trying to find out which areas are most essential in terms of security interests?

That process, at least to a new member of this committee, is completely lacking.

Mr. CARLUCCI. Not an adversarial relationship. My experience with this committee was always very positive.

My understanding is that the 1984 DOD budget did come in under the 1983 first concurrent resolution level. So, DOD was responsive to the priorities, the overall level that was set by the Congress.

There may be differences on the composition of that budget and the Congress itself may have different priorities. But that, to repeat, seems to me to be a function of the Congress itself and not a function of the executive branch.

Senator KENNEDY. Clearly there are weapons systems where there are differences with the administration.

But in terms of the overall security interest and what is the most essential, the most necessary in terms of security interest, it would seem to me that if the Congress makes a judgment about a percent of real growth, that there ought to be at least some kind of process, some kind of system by which there can be some kind of prioritizing.

I have not seen that. I have seen the requests. Senator Warner and the others on this committee have made those requests of the

Chiefs and others, of the Secretary of Defense, and that was not really forthcoming.

Let me move on.

For example, there has been talk by the President about this new commitment in the space wars project.

How do you go about evaluating that type of recommendation? How do you evaluate what should be allocated in terms of resources in that area versus readiness and preparedness in terms of munitions development and other weapon systems? How does that run through your process?

Dr. **DeLauer**. I will give you a status report of where we stand right now and maybe that will answer your question, Senator.

When the President made a speech on defense against ballistic missiles and we wanted to make the technology program in a very few days, we had the proper directives out of the White House to go do something and we did.

We set up two working groups, one chaired by myself, one chaired by Fred Ikle, one looking at the policy arms control implications of any defense against ballistic missiles.

I looked at and set up programs that looked at technologies that can support the President's initiatives. Those two groups report to an interagency organization that is chaired by Paul Thayer.

He has State and everybody involved in it so he can make recommendations to the President. I set up a study group under Jim Fletcher who is ex-Administrator of NASA. He puts technical people together. They examine the technical basis for such a set of systems because there is more than one system. They report to me.

I in turn made the report to this working group and they have now made a recommendation to the President.

In that case, the point you made, we said that we gave them a program that was technically constrained. I don't know how much it would cost in the next 5 years to do that program. Essentially we had one that was fiscally constrained and told them what we could do and how much we could afford to pursue.

Now, it turns out in this particular instance there are moneys in the existing defense program to handle some of the same things. They may have to be reprogramed, some projects have to be stopped and others started, but in the aggregate sense we have reasonable amounts of resources already devoted to this particular area of concern.

That is now in the hands of the President. He is going to make a decision. He will come back to us and it will come back in the form of a defense budget.

Whether he will add to the budget or whether he will say include that in your top line is uncertain. We may have to go back and do what you ask, to do some prioritization or identify the things that will have to be stopped.

That is what we will be doing in the next month.

Senator **Kennedy**. In that recommendation do you talk about the trade-offs? Do you say we are going to have less, if we go this route, we are going to have less airwings, we are going to see a reduction in the purchases of F-16's, or we will have to defer moving to a 600-ship Navy, we will have to stretch that out over a longer period of time and that will cost an additional *x* billions of dollars?

When it goes to the President, do you point out the trade-offs that are going to be necessary as we move on into that particular endeavor?

Dr. DeLauer. At the present time we recommend that he have an add-on. I don't know whether he will accept that recommendation.

If he does not accept, then as you have just said, we will have to make trade-offs with force structure, modernization or readiness. Those are the only things we can do, the heck with the rest of them.

Those are the only three things that we spend money on. If it comes back and the recommendation is that "I am not going to increase the top line" or "Here is the top line and you have to include this," then indeed through the DRB process we will have to make the trade-offs of force structure, modernization, and readiness.

Senator Kennedy. You didn't feel that this was sufficiently promising where you are prepared to defer progress in any one of those three areas given the possibilities in this new area?

Dr. DeLauer. No, not at the present time because we are almost there as it was. What was recommended to us to do in a technical sense, the amount of additional resources needed in the next couple of years were not orders of magnitude. They are like 25 or 50 percent of what we already have in the program.

So, they are manageable. If the numbers are done, we will have to go back and do exactly what you said. I didn't do it in the first instance, no, sir.

Senator Kennedy. Thank you.

Chairman Tower. Senator Bingaman?

Senator Bingaman. Let me just try to followup a bit on some of the questions that Senator Cohen and Senator Kennedy have already put to you about the question of how you avoid this massive buy-in that you referred to, Mr. Carlucci.

You say that Congress is engaged in a massive buy-in by shaving programs and killing none?

Mr. Carlucci. Shaving them rather than killing them?

Senator Bingaman. Right, shaving them rather than killing them.

How do we solve that problem? When the administration comes in with a request for a 10-percent increase and the Congress wants to increase the expenditures by 5 percent, how do you propose that we intelligently kill the program?

Mr. Carlucci. Overall priorities which are consistent with what I gave you when I was Deputy Secretary.

I think the way to cut the budget if you decide to cut below a certain percent is to cut force structure. This is the way to be honest with the American people, not to shave readiness and sustainability and not shave programs, because that will just provoke cost overruns in the future.

Senator Bingaman. You don't think we should be killing programs?

Mr. Carlucci. Yes, you should indeed be killing programs. I said not shave them.

Senator **Bingaman**. How do you get from the 10 percent to the 5 percent by killing programs if the administration will not tell us where their priorities are and which programs to keep?

Mr. **Carlucci**. The administration will be most happy to tell you the impact of killing a particular program.

The Congress has rather capable staffs and can certainly perform these kinds of analyses on their own. I don't think the administration should be obliged, after sending up to the President's budget, to turn around and tell you where to cut that budget. I think that undermines the whole budget process.

Senator **Bingaman**. If that is the case, then the administration should not be in a position to complain when we cut in the wrong place.

Mr. **Carlucci**. No, the administration can tell you the impact of your cuts and they can tell you the relative impact of the cuts that you propose.

Indeed, they do that. If they say "For gosh sakes, don't cut this program," that is a pretty clear statement.

Senator **Bingaman**. My concern is they don't say that until we have made our cuts.

We had some testimony last week pointing out that we have made a very unfortunate cut in funds that were needed for automated data processing for the Navy, cut $30 million out of it, a particular line item.

That is something the first of which I heard of it was after the fact. If that had been a priority, should we have not known that before we were asked to mark up that bill?

Mr. **Carlucci**. Senator, I would be very disappointed if there is not some kind of behind-the-scenes dialog on these cuts. Certainly such a dialog existed when I was in DOD.

What you are really talking about is obliging the administration to come out publicly in a hearing and say, "Well, we sent you up the budget, but here are the areas where you can cut it."

We need to cooperate behind the scenes, but we need to avoid the kind of political pressures that are generated by doing this in an open forum.

Dr. **DeLauer**. As our Secretary keeps reiterating, you tell him where we can change the commitment the country has made in the area of security and he can tell you what priority programs can be changed.

Now, we have provided to the Congress what Frank has indicated, I use an engineering term, essentially influence coefficient.

If you cut one wing of aircraft, here are the savings you can make. If you cut a battle group, here is what it will cost. If you cut an Army division out, here is the money you save.

Senator **Bingaman**. That is not setting priorities. That is telling us what the costs are of different possibilities.

Dr. **DeLauer**. But the priorities are set by the commitments and that is what the President's budget is. They are set as his estimate of what it takes in toto to meet the commitments.

Senator **Bingaman**. I am just saying once Congress decides that, regardless of what the President wants to spend, this is what he is going to be able to spend. We need more help in setting priorities at that point.

Mr. Carlucci. I think we can give you help, Senator, but you surely don't want the executive branch setting congressional priorities.

Senator Bingaman. I don't know why not. They certainly give us advice on anything else.

Dr. DeLauer. The two-way street works very well. We get the same advice in the other direction.

I think if the Congress in its wisdom feels that the Nation cannot afford a defense establishment of a particular size, then I think Congress in its wisdom should also take the responsibility of how that reduction is implemented.

Senator Bingaman. You don't feel that there is any problem with the administration then coming back afterward and saying, "No, you are cutting in the wrong place, you are hurting our overall defense capability here"?

Mr. Carlucci. Dr. DeLauer has hit upon the essential issue. Let us be frank about it. I can be very frank, now that I am out of government, and to talk about political pressure and where that lies, less than in a dialog.

Certainly you can have a dialog, but that dialog ought to be accomplished in such a way that the political burden is shared between the Congress and the administration and not a hot buck which is passed between one and the other.

Senator Bingaman. Let me ask one other question, Mr. Carlucci.

You say here in your last sentence of your testimony that the Congress should "adopt a supportive role and examine its own procedures."

Could you be specific about what procedures we follow that should be changed?

Mr. Carlucci. Certainly.

Dr. DeLauer mentioned the budgeting cycle and the Secretary's recommendation for a biannual budget. Leaving aside the politics of it, I could guarantee you enormous savings if you put the procurement budget of DOD on a 4-year cycle, multiyear procurement, encouraging economical production rates.

We talked a little bit about joint programs. Part of the problem of joint programs is the end run by the services, the Congress making clear to the services that the Congress is supportive of joint programs.

There are a whole host of things that I would be delighted to submit for the record.

Senator Bingaman. We may need 32 initiatives in that area as well.

Senator Nunn. We have just done that on joint programs. I think Congress has done that. The Congress has worked with the Defense Department. The end runs were made by the service.

Mr. Carlucci. That is right. The end runs are made by the services.

The Congress has to say to the services, you go back and cooperate.

Senator Nunn. We have done that on the conventional programs. I don't think it works.

Senator Bingaman. Those are all the questions I have.

Thank you, Mr. Chairman.

Chairman TOWER. Gentlemen, thank you very much. There is a great deal more that we would like to ask you, but we are operating under time constraints.

Dr. DeLauer, we may submit some additional questions to you for response for the record.

Mr. Carlucci, we are delighted to see you back again.

I want to thank both of you. I want to say that we owe Mr. Carlucci a debt of gratitude for the initiatives he did take and Dr. DeLauer as well for attempts being made to implement these initiatives.

I think the situation has improved. I think more ought to be done that all of us can do.

Thank you very much.

Dr. DELAUER. Thank you.

Mr. CARLUCCI. Thank you, sir.

Chairman TOWER. Our next witnesses are David Packard, former Deputy Secretary of Defense and now chairman of the Board of Hewlett-Packard Corp., and Norm Augustine, formerly Under Secretary of the Army, and presently Chairman of the Defense Science Board and president of Martin-Marietta, Denver Aerospace.

Gentlemen, you may submit your complete statements for the record and summarize. We will include anything you submit for the record.

In any case, you may proceed as you see fit.

STATEMENT OF DAVID PACKARD, CHAIRMAN OF THE BOARD, HEWLETT-PACKARD CORP.

Mr. PACKARD. Thank you very much, Mr. Chairman.

I am not going to go through my paper in detail.

I might comment I have been interested in listening to this discussion and watching what is going on in the Department because it was just 2 months short of 14 years ago I took on the job of Deputy Secretary of Defense and the discussions have not changed very much and as far as I can see, the performance of the Department has not changed very much in that period.

I would like to point out we started DSARC, we started this check-off analysis.

You raised the questions earlier about the operational testing. I would like to tell you what happened during my period on that subject.

I set up an operational testing function in 1971. I was convinced that it was essential that we do testing of these weapons in an operational environment before we get too far in production, before I left the Department.

I set up General Starbird who had a very good record as manager in the Department to head this up and it got underway.

Two years after I left the Department Admiral Zumwalt called me up and said:

> The project managers are complaining this operational testing system you set up is delaying the program. Will you come back and look into it for me and if you do, I will take your recommendation.

I came back and spent 3 weeks, looked into four or five of the programs thought to be held up. In every case operational testing had found a critical fault in the program and it would have been a mistake to go ahead without operational testing.

I am glad the Congress has put operational testing back in as a requirement. I don't see why it got out of the system when we had it going the way it should have been going at one time.

As I look at this military procurement problem, I really think there are some structural changes that should be made. I have outlined some of those in my paper. I realize that some may not be doable for various reasons.

Let me just go through them briefly and then we can discuss them in detail through questions, if you wish.

In the first place I think we have to have a better system of making decisions about our force structure requirements.

Basically, our force structure should be designed to support our national objectives. The system now does not work very well in that regard and that is due in a very large part to the fact that the services have and undue influence in formulating the force structure.

So, I recommend very strongly that some action be taken to reorganize the Joint Chiefs along the lines that have been recommended by General Jones, but there are a number of details that I think need to be considered.

The Chairman should be set up to have considerable independence in his recommendations.

The Unified and Specified Commands should be brought into the decisionmaking on force structure because after all they are the ones that are going to be using the forces and it is just a simple tenet of good management that the people who are going to be involved in using the forces ought to be involved in deciding what those forces should be.

This would, in my view, put the right input into the readiness question. The Unified and Specified commanders are the ones that have to face the readiness problem.

I think the Office of the Secretary of Defense should spend more time in overall policy and less time in detailed supervision of the individual weapon programs.

I think that restructuring the Joint Chiefs, giving the Chairman more authority, reducing to what extent you can the service influence on the development of force structure, getting that more closely coordinated with our national objectives would be a very positive step and it is consistent with the other objective of reorganizing the Joint Chiefs and that is to clarify the command structure from the President to the Secretary to the Joint Chiefs and to the Specified and Unified commanders.

When you get down to the basic problem of management of new weapons programs, the basic theory is that the services are the ones that are expected to implement the new weapons program once the decision is made as to what they should be.

This is a very difficult management job. These major weapon systems are complex, they are large, they require advanced technology. We unfortunately have a system where we do not train and put the best management people in charge of the these programs.

I have made this comment a number of times when I was here and I have seen it over and over again in many business situations.

If you want a good job done, you put a good man in charge, you give him authority, you give him responsibility and you evaluate his performance.

In our Defense Department, we have a system where we are taking military people, moving them back and forth, back and forth, from various different kinds of assignments. I think if there was any way that the services could be restructured so that there was a career path for management people, and those management people were selected with some background and expertise and interest in the management process we would see a great improvement.

There should be an ongoing management development program. As a matter of fact, we established what we thought would be a useful one at the Management Development School at Fort Belvoir.

The people who manage major new weapons programs should not be transferred back and forth from other kinds of assignments.

You talk about cost overruns. The way to control cost overruns is to put good managers in charge of their programs. If their program ends up with an unacceptable cost overrun, they should be held accountable for it.

If you do that for a little while, you will have your managers responding to what they should be responsible for.

I don't see any way that you are really going to get at this problem until you find some way to get better management capability, support it, and give the people the responsibility and authority and back them up, and don't supervise them on a day-to-day management basis.

The second step is to eliminate the amount of oversight. The amount of oversight is really a very serious problem.

There was a recent study on this subject by the private sector. Some of my company people were involved in looking at the organizational structure of the various Government departments to see how they compared with each other and how they compared with what is being done in management in the private sector.

The results are very interesting. I will give you these figures.

In terms of the average number of workers per management: In the Government as a whole, it is 5, in the private sector as a whole, it is 6, in the Defense Department, it is 3.8 workers per supervisor.

There is your problem right there. You have too many people looking over the shoulders of the people who are supposed to be doing the work. So, the people doing the work spend all their time trying to satisfy these oversight activities instead of getting the job done.

What can you do about that? There has been some talk about strengthening the role of the service Secretaries and I am cool about that because in the DOD practice strengthening the role of the service Secretaries simply means give them more staff people, and that is the wrong thing to do.

The thing I think you should look at here is to combine the staff of the service military people with the staff of the service Secretary and cut out one layer.

As it is now, the people who are supposed to be doing the job in the service have their staff, and it is a good staff and they perform with a good deal of integrity, but they don't have the expertise necessary for the reason that I have indicated already.

Then you have the service Secretary staff with oversight responsibility which all too often degenerates into a decisionmaking activity.

Then you go up to the Secretary level of the Office of the Secretary of Defense and you have a very large staff there.

I set up the DSARC program when I was out here with the idea that the way to solve this problem is to get the services to do the job right in the first place and DSARC should simply monitor this process. I thought that, given a little time and coaching, the services could be brought around to do the job right and the DSARC would not have to make overriding decisions about the new weapons programs.

Then, we have the oversight responsibility of the Congress and the staffing of that function has increased very substantially in the last 14 or 15 years.

So, we simply have just too many people supervising the people who are supposed to be doing the work.

I think it is going to be very difficult to make any real improvement on these problems unless we can make some structural changes.

Let me just summarize what I think these might be and I have some more detail in the paper that you can look at if you wish.

I think the first two go together really. The JCS should be restructured to eliminate the present "log rolling" service involvement in establishing military requirements.

The OSD should be restructured to pay more attention to establishment of military requirements to support national policy and less attention to detailed decisionmaking on military procurement.

The question has been asked about priority, and so forth. The priority should be to determine, at the top level with military advice, with advice of the Secretary, with the advice of the administrative branch and the Congress, what the force structure should be. Once you do a better job of establishing a force requirement and developing it down into specific weapon programs, I think if you had that mechanism structured better, you would have fewer of the problems that you are now plagued with. We would not have decisions on individual weapons without really having any good understanding about how those proposed weapons relate to the overall ability of the forces to do what they are expected to do.

The services, I think, must be restructured in some way or encouraged in some way at least to insure well-trained managers are put in charge of all major procurement. These managers must be given the necessary authority and responsibility and they should be given just as much incentive for good performance as people receive for good performance as commanders in military operations.

Now, we have had some examples over the years when this has been done. In a sense, Admiral Rickover's performance was essentially that. He may have taken some of the authority in his own hands, but at least he had it and he took charge of his programs and I think you can say that the programs he managed were well managed.

In fact, other people had a little difficulty in overriding anything that he decided which turned out to be a good way to handle the complicated weapons programs he managed.

If you look at General Schriever's performance in the Minuteman program, in an earlier period, here was a man who was a very able manager. He had responsibility and authority and he got the job done without too much supervision from overhead.

We have a number of examples of where this has been done.

It seems to me that this committee can make a larger contribution in improving the performance of our procurement program in the military area by doing something to make sure that we get and keep well trained managers and teams of well-trained managers on these programs.

The Unified and Specified Commands should have more input, particularly in the O&M military requirement.

I think the service Secretary's role should be restructured to minimize or eliminate staff involvement in the procurement program and the role should not be strengthened in any way that would require more staff. I recognize to do that may be a difficult thing politically, but I think the role of the service Secretary can be made prestigious enough in other ways than having them get involved in detail and particularly without having to duplicate staff.

Finally, I would like to tell you that almost any restructuring of the Department that will reduce the number of people involved in the procurement process will improve its performance.

[The prepared statement of Mr. Packard follows:]

PREPARED STATEMENT BY HON. DAVID PACKARD, CHAIRMAN, HEWLETT-PACKARD CO.

I am pleased to have the opportunity to appear before the Senate Armed Services Committee to discuss the Department of Defense acquisition process. I understand you would like to focus on structural questions and I will endeavor to do so.

The first issue is the formulation of requirements and here there is, in my opinion, a most serious structural problem. The services have the responsibility to procure the equipment, raise and train the forces that may be required to implement our national policy. These forces are then deployed under the Unified and Specified Commands as directed by the commander-in-chief, the President.

To a large extent the formulation of requirements is done by the services and is influenced far too much in the interest of the individual services rather than in the national interest.

Our military planning to support our national objectives should be the foundation on which the requirements for both equipment and manpower are developed. This is a complex problem, for to begin with, our national objectives are seldom well defined; they must change as the world situation changes and they do change with changes in administration. Determining our national objectives is in the final analysis the responsibility of the President and the Congress. It is, however, essential that there be a military imput to the determination of our national objectives for it is the responsibility of the Department of Defense to support those national objectives which may require the use of military force. Clearly, it serves no useful purpose, in fact it may be dangerous, to have national objectives that can not be supported when military force may be needed.

There are some structural changes that are needed to coordinate our military planning with our national objectives.

First, the Office of the Secretary of Defense should be restructured to provide a more effective coordination between military planning and national objectives.

The Blue Ribbon Defense Panel of 1970 had this problem in mind in recommending that the department be divided into three functions.

(a) Military operations. In my view this should include military planning, command and control of forces, intelligence and communications.

(b) Management of personnel and material resources. (Procurement)

(c) Evaluation type functions, financial controls, etc.

I believe that the OSD could greatly strengthen its involvement in military planning and that it could do so without overall increases in cost or management. This should be done by eliminating some of the detail involvement in the procurement process which I will discuss in the following pages. This should not necessarily require the adoption of the specific recommendations of the Blue Ribbon Panel although their recommendations are in the right direction.

Second, the JCS must be reorganized to reduce the individual service influence on military planning. The Unified and Specified Commands should have more influence on military planning. After all, they are the ones who will be called on to implement the plans. It is sound management policy to have those who will implement a plan involved in its preparation, and the military organization should be no exception.

There has been a good deal of discussion about reorganizing the JCS and I believe this is the time to take some action. Here are the basic principles I would recommend.

1. The Chairman alone should be the only chief in the command line from the President, the Secretary of Defense to the Unified and Specified Commands.

2. The Chairman should have his own staff; actually, it should be the independent staff of the JCS, and although the service staffs could be used to assist, they should be brought in at the request of the Chairman, and the service staff people should work under the supervision of a member of the JCS staff when working on problems for the JCS.

The essence of the problem is to devise a mechanism by which the Chief of the military department would have more loyalty to the JCS and less to his service. It is possible that the only way this could really be done would be to have the JCS made up of service chiefs who had just completed their tour and who would not go back to the service. I know there have been a number of schemes proposed to make the JCS more independent of the services, but I do not see how this can possibly be done with the service Chief holding two jobs with conflicting requirements.

The present system of determining military requirements should be improved.

The top priority of the OSD should be to work closely with the President to make sure the overall plan for our military requirements is consistent with our national policly. To do this right requires military expertise which sould come from the JCS and the Unified and Specified Commands and not from the services. The services should have some input, but it is very difficult to properly balance force requirements under the present system.

As you know, there has been major waste over the years from major programs being started and then stopped and then sometimes started again. The B-1 is a recent example. I believe the system can be improved to give more careful consideration in determining our military requirements. This should result in better balanced forces and fewer start and stop decisions on weapons procurement.

The services have the basic responsibility for the procurement of material. If one were to structure the system on the basis of good management practice, the services should be directed as to what weapons to procure from the OSD developed under the system I have just described. They should be given the necessary authority and resources and they should be evaluated on their performance. They should not be given detailed direction of how to do the job.

When I established the DSARC in 1969, I had in mind that it should be a performance evaluation mechanism, not a decisionmaking mechanism. I thought we could get the services to make some changes in their procurement practices for major weapons systems and the OSD should get out of detailed step by step approvals on major procurement. My plans were not followed and I will say something more about DSARC in my following comments.

As we grappled with the procurement problem when I was Deputy Secretary, I kept coming back to a very simple tenet of good management.

If you want a good job done whatever the matter, put a good man in charge, give him the necessary responsibility and authority to do the job, evaluate how well he does the job not how he does it, and provide some incentive for a good performance.

My opinion on this matter was fully supported by a number of examples. Admiral Rickover in the Navy, General Starbird in the Army, Bernie Schriever in the Air Force for example. They were real professionals and they had the authority to get their job done.

The services have the responsibility for the development and procurement of weapons. The reason the OSD (and sometimes the Congress) gets into the act is because the services are not structured to do the job right.

Managing defense procurement is a difficult job. Major weapons systems involve advanced technology, they require high quality and reliability, have a time urgency, and the cost should be kept to a minimum. To manage such programs effectively requires the highest level of professional management.

It seems to me that the only way the services can develop managers of the quality needed for these major programs is to make defense procurement a separate and a lifetime career for the people who do the work.

Each service must also develop officers for combat command and here, too, this should be a lifetime career. These men should be experts in strategy, tactics and military leadership.

What I am suggesting is that each service should be restructured into two arms. One arm would be responsbile for the procurement and development of military manpower and military leadership, the other arm would be responsible for the development and procurement of weapons and for the logistic support.

Officers would not rotate back and forth from military assignment to procurement assignment. A project manager would have a great deal of management training before he was assigned to a major weapon program and when assigned, he would be kept in charge of that program until it was completed.

There has been some discussion of this kind of an approach and some officers have specialized in procurement. When we started the F-15 program in 1970, an experienced officer was put in charge and he stayed with the program long enough to get the job done. This has been done on a number of successful programs. It should be done on all major weapons development programs.

Actually, these programs need not one good manager for each project, but a team of good managers for each project, and the procurement arm should involve recruiting people with management capability and a strong program of management development.

Restructuring the services into what might be called a Military Manpower Corps and a Weapons Procurement Corps has a precedent in military history.

Traditional military forces consisted of a fighting corps and a corps of engineers. The engineers were specialists who built the fortifications, the attack machines, the roads and the bridges. Often the outcome of a battle or a war was determined by the skill of the engineers. Today the outcome of a battle or a war will be determined by the quality and the capability of the weapons as well as the skill and the motivation of the soldiers and their leaders.

I believe, then, that each service should be restructured to have two clearly defined and separate career paths for the development of officers. One would be to train men and women as commanders of military forces, the other would be to train men and women as managers of procurement.

This has been done to a limited extent by the services. I established the Defense Management School at Fort Belvoir in 1970 to provide better training for those who will be in the procurement assignments.

Some progress has been made but I believe the time has come to go ahead with a complete restructuring of the services along these lines.

One thing that contributes to inefficiency is that there are too many people involved in these major development programs. The service has a team assigned to the job. The service Secretary has a staff overlooking this team, the OSD has a staff overlooking the team and the Congress has one or more staffs overlooking the team that is doing the work.

While each of these staffs has basically a legitimate oversight responsibility, all too often this turns into a decisionmaking activity and the people who are doing the work spend too much time keeping all of these oversight staffs satisfied.

I do not see how this problem is going to be solved without eliminating some of the people who are now involved. I doubt that the Congress will reduce the level of staff oversight on defense procurement, in fact the level has been increasing. Certainly if the programs were managed better, less oversight would be needed, but one of the things that is contributing to poor management is too much oversight.

It is my suggestion that the role of the service Secretary should be looked at. Perhaps the service Secretary should be restricted to overall policy matters and should not have a staff which matches that of his military service.

It has been suggested that the role of the service Secretary be strengthened. In the DOD that means giving him more staff and that is the wrong direction to go.

In the OSD the DSARC should be limited to a few major checkpoints. One should be to determine that the technology is available for the proposed new major weapon when the development is started. Another should be to determine that the development is complete before production is started. This should involve a check on the adequacy of operational testing of the new weapon. DSARC should be limited in its review to major weapons.

The OSD should place more effort on policy, setting objectives for the services to meet, and less on detailed supervision of the service programs.

Operational testing is a subject that has received considerable attention during the past few years. When I was Deputy, I established operational testing as a separate function. The services resisted this move and a few years after I left the department, Admiral Zumwalt said he had received many complaints that the separate operational testing requirement was unduly slowing the development of several new weapons. He asked me to look into this matter and I found that in every case important faults were found by operational testing and the production should have been delayed until the faults were corrected.

I understand the Congress has recently mandated that independent operational testing be required. If the services had truly professional people in charge, the importance of testing a new weapon under real operation would have been recognized as simply a part of good management practice.

While not a structural problem, I want to say something about competition in military procurement. If a product is fully designed, competition can often lower the cost. If a product is not fully designed, the only way you can have real competition is by the prototype approach which I started when I was in the department. The A-10 and F-16 and F-17 programs resulted in good products at reasonable cost and lead time. These programs had desired performance specifications given without all the usual detailed design specifications. I encourage the Congress to insist on the use of the prototype approach wherever possible.

Without prototype production which tells what the contractor can actually do, competitive bids for new weapon system development are largely a farce, I visited more than one contractor whose program was behind schedule or over cost, or did not meet specifications. When I said, "You must have known that your bid was too low and the time you promised too short when you took the job, why did you do it?" "Yes," the contractor said, "I did know that but otherwise I would not have gotten the job."

Last year I chaired a White House Science Council subcommittee to look over the Federal laboratories and earlier this year we issued a report with some recommendations for improvement. We concluded that the country is not getting its money's worth for the $15 billion it is spending on the Federal laboratories. Many of these laboratories are in the Department of Defense. The roles and missions of all of the DOD laboratories should be reviewed to make sure their expertise is used on all new weapons development. The present practice is spotty. There is overlap in work being done and the quality of research is not always as good as it could be.

The DOD laboratories operated by the department can not attract the best young people and can not keep the best experienced people. The laboratory managers do not have enough flexibility in funding to encourage innovation from their engineers and scientists. I have reviewed this report with Secretary Weinberger and I understand he wants to implement the recommendations we have made. This may require some structural changes and I hope this committee will support his recommendations when they are made.

In summary, I believe there are some structural changes that should be made to improve the procurement program in the Department of Defense.

1. The OSD should be restructured to pay more attention to the establishment of military requirements to support national policy and less attention to detailed decisionmaking on military procurement.
2. The JCS should be restructured to eliminate the present "log rolling" service involvement in establishing military requirements.
3. The services should be restructured to insure that well trained managers are put in charge of major procurements. They must be given the necessary authority and responsibility, and these people should be given just as much incentive for good performance as is given for being a good commander of military operations.
4. The Unified and Specified Commands should be involved with the JCS and the OSD in establishing military requirements.
5. The service Secretaries' role should be restructured to minimize or eliminate their staff involvement in procurement programs. Their role should not be strengthened in any way that would require more staff.

Almost any restructuring of the Department of Defense that will reduce the number of people involved in the procurement process will improve its performance.

Chairman TOWER. Thank you.

Mr. Augustine?

STATEMENT OF NORM R. AUGUSTINE, PRESIDENT, DENVER AEROSPACE, MARTIN-MARIETTA

Mr. AUGUSTINE. Good morning, Mr. Chairman and members of the committee.

I appreciate this chance to share my views with you on the acquisition process. You will find considerable similarity with the comments made by my colleague.

With your permission, I would like to submit a formal statement for the record and just extemporaneously summarize it this morning.

Chairman TOWER. We will include your full statement in the record.

Mr. AUGUSTINE. Thank you.

It goes without saying that all is not well in the defense acquisition process. This is despite the fact that in my experience some of the most capable and dedicated people I have ever worked with are in the Department of Defense and have tried to make that process work.

It is truly an example of a system where the whole is less than the sum of the parts. When asked why that might be the case, I would point to several factors.

One is that the process does not account for uncertainty, for the existence of the unknown, things that will happen in the future that one truly can't control. We don't allow for that in our budgeting, our scheduling, our manpower, and so on.

The second problem, the most important, I call the existence of enormous turbulence in the process. Decisions are made, are changed, and then they are changed again. People are changed. It is very hard to manage in this kind of environment. It may be almost impossible. Previous witnesses referred to that, I believe, as lack of stability.

Third, I would mention the importance of people, keeping good people working for the Government to manage the acquisition process. Certainly no company would long survive paying the top five layers of managers the same salary as happens from time to time in the Government.

One can't overemphasize the need to keep good people in the Government.

In my written statement I have contrasted what I think are typical characteristics of industrial management practices to Government management practices of acquisition systems. The contrast I find is very striking.

You asked this morning that we talk more about the structural reform of the process, so I would like to spend the rest of my summary talking about that subject.

Let me begin with the Office of the Secretary of Defense, where I spent some 5 years.

It would be my belief that the Office of the Secretary of Defense should play the role of addressing those truly key issues such as: Should we have more carrier airwings? Should we have fewer light infantry divisions? Should we have more cruisers? Should we have less antisubmarine warfare?

Those crucial issues tend to get addressed rather informally and rather intuitively through the budget process. I think those are the places where impact could be made.

I think OSD could be particularly effective in auditing the acroperformance of the services. I think it could play an important role in overseeing, and I emphasize overseeing as opposed to conducting, the testing of the end product that the process produces.

On the other hand, I believe OSD should not be involved in day-to-day operating management issues. I believe they should not specify detailed requirements for a carrier aircraft or a tank, or the likes.

The systems analysis function in OSD, I believe, can play an important role in helping to set the priorities I have mentioned. But I believe the role of systems analysis should be one of presenting a balanced, factual, accurate, all encompassing assessment of information and should not take a position itself. It should not be judged by how well it defends its own particular viewpoint, but rather by how well it provides data to the decisionmakers; in this case, to the DRB.

I believe the role of the central cost estimating group in OSD could be further strengthened. One thing that could be done to do that is if the policy were stated that no budget decision would be made nor any program decision made based upon a cost that was not endorsed by that office.

In other words, it would have the final say in what costs were used to make estimates.

Turning then to the role of the services, whereas you mentioned, I spent some 4 years. I see the service role as being one of carrying out the programs that were decided by the OSD.

I think the services should be permitted, or indeed demanded, to manage the programs they undertake in an efficient way without day-to-day involvement of the Office of the Secretary of Defense.

I believe the services should conduct the DSARC's. I realize this is a significant change. I think that it probably could only be done after a trial period to see if the services are prepared to step up to the responsibility that this entails.

The relationship between the DSARC and the DRB then, in my mind, would be similar to the relationship between the authorization and appropriation process in the Congress.

With respect to service Secretariats, I believe the service Secretaries themselves fill a useful and important role in extending civilian control outward from the Secretary of Defense.

On the other hand, if one were to wish to reduce the size of the acquisition structure, to seek to reduce layers, one thing that could be done would be to restructure the service Secretariats so that they consisted only of the Secretary, the Under Secretary, and perhaps a 10-person personal staff. All other support for the service Secretaries would come from the service staffs that today report to the Chiefs.

In other words, they would share the same staff support. I believe that is similar to what Mr. Packard was suggesting.

Turning to the role of the Joint Chiefs of Staff, I see them playing a greater role in the acquisition process in the requirements area, particularly in dealing with requirement issues that cut across service lines.

It has been my observation that the strength of the OSD has largely resulted from the unwillingness or inability of the Joint Chiefs of Staff structure to step into tough cross-service issues.

The OSD Secretariat has been willing to step into those issues. I believe if the JCS had greater authority in the area of requirement for new systems, if they would call on the field commanders, the CINC's, for inputs, as Mr. Packard was also suggesting—it is said that the best parachute packers are those who jump—the acquisition process would be strengthened.

To do this, though, the JCS probably needs some changes. I would endorse many of those that have been suggested by others including giving the Chairman more authority, making the Joint Staff responsible to the Chairman and having a Deputy Chairman of the JCS, one of whose important roles might be to be the overseer of the requirements process and in particular joint requirements.

That is a brief statement of some rather controversial suggestions: mostly difficult suggestions to implement, I am afraid.

But I can't, Mr. Chairman, stop at this point in good conscience without offering a few personal observations with respect to the impact of the Congress on the acquisition process.

Let me say that I understand the frustration of the members at many of the failings of that process over the years.

I also understand your eagerness to step in when you see those failures and attempt to run the process yourself.

More and more the actions of contractors are being affected by decisions made by this body at a very detailed and very specific level.

I am afraid that the effort of Congress to step in and try to make this process work comes under the heading of those activities described by H. L. Mencken as simple, elegant, and wrong.

I suspect the proper role of the Congress, if I might, is perhaps more——

Chairman TOWER. Fire away.

Mr. AUGUSTINE. Thank you, sir.

More appropriately compared with the role of the board of directors of large conglomerate.

I would suggest that no conglomerate could survive whose Board became involved in daily operating matters to the extent the Congress does.

Having said that, let me say again that my comments are made most respectfully and in the sense of sharing your desire to try to make the defense acquisition process work better.

I thank you for letting me share these thoughts with you.

[The prepared statement of Mr. Augustine follows:]

PREPARED STATEMENT OF NORMAN R. AUGUSTINE

ORGANIZATIONAL ASPECTS OF THE DEFENSE ACQUISITION PROCESS

Mr. Chairman and members of the committee; I view it as a distinct privilege to have the opportunity to appear before you to offer my views on the defense acquisition process. It has been my good fortune to appear before this committee on a number of other occasions over the years, however, seldom has the subject been of greater importance than that of this particular hearing. If the Untied States is to continue to embrace military forces which are smaller in number than those of our potential adversaries, it is crucial that we organize to equip those forces in a manner which helps contribute the margin of superiority to assure victory.

All is, of course, not well in the acquisition process. This is in spite of the involvement therein of many of the most capable and dedicated individuals with whom I have ever had the privilege of being associated. The acquisition process is truly an example of the whole being less than the sum of the parts. The question, of course, is "why"?

Before offering my own answer to this question, and I would emphasize that the views I will express are purely those of myself as an individual, I should in fairness like to expose my perspective. Mine is a view derived in part from service in three different positions in the Office of the Secretary of Defense under four different Secretaries of Defense beginning with Mr. McNamara. It is also drawn from service under two other Secretaries of Defense, as a Presidential appointee in three different positions in a Military Department, principally as Under Secretary of the Army and, briefly, as Acting Secretary of the Army. However, I consider myself principally and ultimately as an industrial executive whose career in industry happens to have been punctuated by periods of service to our government. My experience in industry has been with three large corporations; currently serving as President of an operating element of an aerospace firm employing under purview some 18,000 employees. I have also been afforded the opportunity over the years to serve on a variety of advisory committees to the Army, Navy, Air Force, OSD, NSC, GAO, NATO and NASA . . . including, at present, chairing the Defense Science Board. My opinions thus suffer from a lack of singularity of viewpoint . . . which I suppose raises the hazard of the lowest common denominator theorem.

I would suggest that three principal problems are evident in the rather troubled acquisition process. The first of these is that many of the products of that process are exceedingly costly and, equally problematical, the actual costs of those products over the years have, according to my own analyses, exceeded the estimated costs in constant dollars by an average of 52 percent. The second is that it seems to take an inordinately long time to develop hardware (and software); slightly over 8 years for the median major system—in spite of the fact that many of these systems incorporate technologies possessing "half-lives" of less than five years. Third, it seems to be very difficult to adopt revolutionary—as opposed to evolutionary—system concepts. Too often we depend on symmetry of forces; "airplanes vs airplanes", "submarines vs submarines", "artillery vs artillery", when the principal effect of such a strategy may simply be to maximize the demand to incorporate extreme technological superiority within numerically outnumbered forces. These problems are exacerbated by the happenstance that burgeoning technology has no respect for service boundaries. Indeed, what is perhaps the Soviet Union's most effective means of attacking our own carrier battle groups comprises earth satellites targetting long range land-based bombers which in turn launch standoff air-to-surface missiles—all in support of the Soviet Navy.

But the above concerns are actually mere consequences of more fundamental problems. Of greater importance from a corrective standpoint are the root causes of those problems. Among these I would again offer three factors for particular consideration. First, the acquisition process has historically failed to recognize the existence of uncertainty; of the inevitability of the unexpected; and as a consequence has made inadequate provision to overcome such occurrences when in fact they do become reality . . . as they virtually always do even in the best managed research and development programs. As a result, no "margin" of funds, time, people, or facilities is allotted to surmount problems when they do occur. The corresponding underestimate of cost at the outset of a program ultimately evidences itself in the form of stretchouts and even termination; that is, as overruns. Our malaise is not so much that we are inept managers as that we are poor cost estimators . . . or, more precisely, poor scope estimators. Furthermore, the acquisition process as practiced over the years tends to encourage this misfortune.

The second root problem of the acquisition process which I would cite is what might be called "ubiquitous turbulence": changing funding, changing schedules, changing objectives and changing people. Continual revisions in a program divert management attention from the task at hand, encourage inefficiency, discourage capital investment by contractors, and undermine employee motivation and morale.

Third, I would point to a ponderous system of procedures—some 42 approval layers to obtain funding for an R&D project which happens to originate at the bottom level of a typical DOD laboratory; the need to obtain coordination from innumerable partners prior to undertaking a task; the need to comply with a multitude of peripheral regulations when seeking to accomplish a task.

You have asked, Mr. Chairman, that I address solutions to perceived shortcomings of the acquisition process from the standpoint of organizational reform, and I shall be pleased to do so. However, I should also indicate that solutions to many if not most of the above difficulities can be found within the existing organizational structure through such means as procedural changes, including uncertainty in cost estimates by employing such techniques as "TRACE" costing (already being used on some projects), two-year budgeting and appropriation, and encouraging truly outstanding individuals to accept and remain in key managerial positions with the Federal Government. In the latter regard, I believe it is safe to conclude that no industrial firm would long survive which from time-to-time pays the top five layers of its management identical amounts—often less than available from alternative employers—and imposes onerous employment conditions albeit under the very legitimate banner of preventing conflicts of interest. It is a tribute to the people who serve our government that the system works as well as it does. It can be shown to be very shortsighted to have other than the very best qualified individuals making multibillion dollar decisions. Our government is blessed with an unusual number of such people—it needs to keep them.

The committee has also asked that the operation of the defense acquisition process be addressed from the perspective of an industrial executive. The contracts which emerge in so doing are indeed striking. I would in fact point to ten marked differences, all closely related to the observation of Gilbert Fitzhugh's Blue Ribbon Defense Panel that, in effect, "Everyone is responsible for everything and no one is responsible for anything!" I would respectfully submit that the Congress itself has earned a share of that particular criticism, at least as it relates to defense matters.

My view of the ten principal distinguishing features between government management practices and industrial practices as they relate to the acquisition of systems are as follows:

The government, seeking to minimize the risk of failure, delegates very little responsiblity to a single individual with the consequence that all decisions involve finding many partners and establishing grounds for compromise.

As a consequence of the above there is little accountability within government projects. An intersting test is to ask "If this doesn't work, who gets fired?" Or, better yet, "If it does work, who gets the credit?"

There is a surprising paucity of discipline in the government's acquisition process. This contrasts sharply and inexplicably with the combat elements of the military where I have observed discipline to be superb. In industry, controversial decisions are also argued vociferously; but once a decision is make it is unthinkable for anyone not to get behind that course and seek with all one's energy to make it a success. In the defense acquisition process, on the other hand, losing advocates merely regroup for a new onslought during the next budget cycle.

Industry depends to a much greater extent on its line organizations as opposed to staff organizations than does the government's defense acquisition process.

The government seeks to manage to a considerable degree by regulation, whereas industry relies more heavily on human judgment.

In industry there is enormously greater latitude to hire and fire, to reward high performers and to reassign ill-suited incumbents.

Audits in industry tend to be assigned comparable importance to audits in the government, but tend to be better-balanced and more directly focused on problem solving.

The size of the enterprise to be managed in government dwarfs the largest industrial firms in terms of complexity, diversity . . . and constraints.

Industry has a straightforward means of measuring day-in and day-out performance. In defense acquisition matters, performance in the ultimate sense is tested only in the event of war.

The consequences of inadequate performance are enormously greater in the government's defense acquisition process—where lives and even freedom can be at stake—than in any industrial undertaking.

What then should be the organization and role of the various governmental elements which together comprise the defense acquisition process? Let me begin with my views on the function of the Office of the Secretary of Defense.

First, it should be stated that this office is of critical importance to the successful operation of the acquisition process. Its role, in my opinion, should be to address the truly major and consequential issues of trading carrier battle groups for intratheater transport for light infantry divisions for strategic bombers for tactical airwings for recruting bonuses and so forth. It should be responsible for auditing the macroscopic performance of the military departments and for overseeing (as opposed to conducting) the testing of the end products of the acquisition process. Given national objectives, it should conduct top-level defense planning and should allocate resources in consonance therewith. It should not be involved in detailed operating matters; it should not prescribe narrow characteristics of the carriers, transports and bombers to be built by the services; and it should specify broad system requirements based on their cost and capability as they impact the total affordable force . . . not on a system by system basis in isolation—as is often the case today. I would offer that the systems analysis function in OSD could be strengthened to deal with the above types of major force planning issues and that the analysis staff should be measured solely on its ability to present balanced evaluations to the DRB rather than on its ability to defend a position which it has itself embraced. That is, it should simply present evidence to the decisionmakers, not make decisions or even, in most cases, recommendations. Finally, one could greatly enhance the capability and responsibility of a central cost estimating group within OSD, requiring that all program estimates be endorsed by that group if they are to be used as a basis for decisionmaking or budgeting.

Under such a structure the Services would then be responsible for actually executing the acquisition programs outlined by the OSD. In this regard, it will be noted that I do not recommend the creation of a single centralized development arm of OSD . . . although one organization, DARPA, does, as an exception, play an enormously important role in its particular province of high-risk research. The services would thus conduct the DSARCS . . . preferably after a trial period to establish that they indeed are prepared to undertake the responsibility that this implies. The relation between the DSARC and the DRB would then be somewhat analogous to the relationship between the congressional authorization and appropriation processes. The DSARC can certify the soundness of an item to proceed through the successive steps of the acquisition process but it cannot contend with priorities and funding in that each DSARC deals with but a single item in relative isolation. Similarly, the DRB is ill-suited to conduct detailed management reviews of individual programs although, with the addition of the service Secretaries, it is well constituted to perform budgetary tradeoffs.

It seems to me that the service Secretaries play a useful role in extending civilian control outward from the Secretary of Defense. If manpower reduction were necessarily to be made one option would be to reduce the service Secretariats to a Secretary, an Under Secretary and a small (10 person) personal staff and draw upon the shared resources of the existing service Staff.

Turning to the Joint Chiefs of Staff, I would envision the JCS assuming a somewhat greater role in the acquisition process in the specific area of requirements definition . . . particularly requirements that cut across service lines. In this role the JCS would call upon the CINC's for inputs and advice. To be effective, however, certain restructuring of the Joint Chiefs organization would probably be necessary. Specifically, I believe it appropriate to make the Chairman, as an individual, the link in the chain of command from the Secretary of Defense. I also believe it would be beneficial to report the Joint Staff to the Chairman rather than to the Joint Chiefs. I would further agree with the recommendation to establish a four-star Deputy Chairman (sixth in protocol) to act for the Chairman in the latter's absence and to take a lead role in allocating materiel system requirements to the services and resolving requirements issues that cut across service lines.

The above recommendations are based in large measure on my observation over the years that the power of the OSD staff has largely evolved from its willingness to step into contentious inter-service issues wherein the committee-nature of the JCS often precluded its effectiveness in this arena.

These thoughts summarize some problems and potential solutions in the acquisition process. Many are admittedly controversial; most, unfortunately, are not easily implemented.

I cannot in good conscience, Mr. Chairman, close without offering a few personal observations about the impact of the Congress on the acquisition process in that this organization, whether by preference or happenstance, is in fact becoming an increasingly key element of the management function. I can, to a not inconsiderable degree, understand the frustration of the Members with the problems experienced in the acquisition of major systems in recent decades. I can also empathize with the desire, having observed others fall short, to step into the breach (with large staffs and heavy personal invovement) to solve those problems which have been encountered. I would respectfully submit once again that this is a solution of the category referred to by H. L. Mencken as "neat, simple, and wrong!" Although perhaps an imperfect analogy, I nevertheless believe that the Congress has a role in the acquisition process similar to that of the Board of Directors of a large industrial conglomerate, albeit with 535 members. Among the most important of these functions would be to assure that our national objectives and our capabilities are in consonance with one another.

Mr. Chairman and members of the committee, these are some of my views on the defense acquisition process. I hope that you will find them of value as you carry out your weighty responsibility of providing for the Nation's defense.

Chairman TOWER. Thank you, Mr. Augustine.

Mr. Packard, you spoke briefly on the duplication between the service Secretariat and the uniformed organizations that deal in the same area, manpower, logistics, whatever it might be. What should we do in that instance? Should we, perhaps, reduce the service Secretariat and leave that to the uniformed services or vice versa?

Mr. PACKARD. I think that the service Secretaries should be involved more in overall policy. The ideal structure that I see would be to separate each service into two branches, one that concentrates on procurement. These would consist of managers brought in for that purpose, trained and kept there.

The other branch would be people trained for military operations.

Incidentally, I think transferring people back and forth perhaps results in less capable people for the military commanders to find, too.

I think the service Secretary's role could be kept very important, but the staff duplication is the problem. I think it is entirely feasible to do, as Mr. Augustine suggests, for the service Secretary to use the service Chief's staff for most of the programs, the detailed work.

There is no reason why that has to be done twice at that level. The small staff would enable him to concentrate on overall policy matters and I think that is the general direction, I would say, that should be considered.

Chairman TOWER. It is also suggested the number of people involved in the acquisition process be reduced. In addition to reducing the number of people, is there any way you would recommend the process be streamlined; say elimination of various layers in that process?

Mr. PACKARD. It seems to me you have this kind of situation. You don't have the management expertise and the support for it at the operating level by the people who are really doing the work.

This results in all the layers of oversight and that contributes to more management. You have to break that cycle somehow.

The way to do it, I think, is to insist that you have a management career course in each service, develop the expertise to manage these programs.

These are terribly complex programs. They are managed by the committee now. No wonder we get into trouble. If they were done right in the first place, you would not need anywhere near as much oversight as you now have.

You have to have some way to break this vicious circle we are in to really accomplish anything.

What is the obvious place to cut down the number of people involved is the service Secretariat's staff.

I think it follows also that if this were done right, you could cut back on the staff level at the OSD and I think that that this would perhaps encourage the Congress to spend less time having to look into these individual programs.

Every time you look at this, you get back to the proposition if you could just do it right in the first place, you would not have to go through all this nonsense.

I don't see how you are going to do it right in the first place unless you have the kind of people who are able to do it, give them responsibility, give them authority, and leave them alone.

I think somehow we have to get that principle involved. You couldn't run a successful business without doing it that way.

We are not running a very successful military procurement program. We are not doing it the right way.

Chairman TOWER. Mr. Augustine, if I may summarize what you said, the Office of the Secretary of Defense should be a policymaking body, making macromanagement decisions. In other words, determine how many carrier wings, that sort of thing, as opposed to micromanagement. What is there in the current structure of the OSD Secretariat that militates against that? What is the problem there? How do we achieve that and still be able to hold the Secretary of Defense accountable for the operation of the Department?

Mr. AUGUSTINE. I point to two things.

One is size. The OSD organization is large enough that it permits people the time and luxury to get into detail

Second, I would point to the fact that OSD has not structured itself to take on these tough cross-service issues.

It is structured more by line item rather than to deal with the lateral issues of the budget.

Chairman TOWER. Both of you have suggested we should trim down the service Secretariat. Let me ask you to comment on this.

The British, a couple of years ago, reorganized their Ministry of Defense, eliminated the service Secretariats altogether and provided for two deputies, one heading up the operational side and the other the procurement side.

Do you think there is any merit in considering that kind of organization of our DOD?

Mr. PACKARD. I think that is the direction that you should try to move to. I think it is generally recognized that you have a lot of people here who are used to doing things in a certain way and you are not going to change it overnight.

I think to make this work right is going to take a sort of step-by-step contest and a little time. I really think if you can move in that direction, you can go a long way toward solving some of those problems.

Chairman TOWER. Mr. Augustine?

Mr. AUGUSTINE. I would view that as a move in the appropriate direction, but, to my mind, a bit extreme.

I think the service secretaries do carry out an important function. I would not deem it to be wise to do without the Secretaries themselves.

Mr. PARKARD. For political reasons, I don't think you could do without service Secretaries. There is no use talking about that.

I really think you should keep them and they can do a useful role, but it will be more in the overall policy and in a cooperative teamwork effort with the service Chiefs.

Chairman TOWER. You suggest service Secretaries be involved more in policymaking and less in managerial responsibility?

Mr. PACKARD. I think both the Secretary of Defense and the service Secretaries should be involved in policymaking. Their role, of course, is to provide civilian control over the military. I think they are necessary for that reason.

I don't see why they have to be involved in the detailed management if you can get the right kind of people to do the job in the first place. I keep getting back to that basic requirement.

Mr. AUGUSTINE. As you know, many countries have looked into having a central organization to do develpoment and acquisition rather than to allocate these functions to each of the services as we do. I believe that, too, comes in the category of something that is probably too extreme.

I fear that if the acquisition process were cut off from the services and the operational commanders, you would lose important feedback on how things are working in the field.

I think you would also lose support from the field commanders for modernizing equipment because they are so busy with the day-to-day problems they have: people problems, and so on.

I would like to go on record as saying I don't think it is a good idea to centralize development under OSD.

Mr. PACKARD. I think that problem can be handled by requiring the procurement people to take a limited tour of duty with operating services.

You do have some communications between people who are developing the weapon systems and the people who are going to use them.

But it takes a special expertise to do the development just as it takes the special expertise for the use. So, you want to have some mechanism for communication, cross-fertilization there, to be sure that the people who are developing the weapons understand the environment in which they are going to be used, and so forth.

I don't see any reason why that could not be managed. We do that in business by making sure we have very close communication with our customers very early in the stage of the development program so that we make sure we are developing what they want.

That is not a difficult problem to handle in an organizational manner. The difficulty is that you don't have the professional expertise on the management side in the present system, with some limited exceptions.

Chairman TOWER. Let me ask the same question I put to Dr. DeLauer and Mr. Carlucci.

Should the acquisition and development responsibility be combined in one office as is currently the case for the Under Secretary of Defense for Research and Engineering, or should they be separated?

Mr. PACKARD. I think there should probably be some separation.

One of the problems I encountered when I was there is that everybody wanted to be in on everything. So you had the logistics people, the comptroller and people like that who wanted to be in on the early stages of development.

I finally made a chart to delineate who should be responsible at particular stages of the program.

I think you do need involvement. As was brought out in the testimony, some input from the manufacturing side ought to be involved very early in the development of the program.

I think you can do this either in one office or several offices, coordinating the responsibility in various ways. I don't think that is a critical issue. I think it can be handled either way.

Chairman TOWER. Do you have any comment on that, Mr. Augustine?

Mr. AUGUSTINE. Yes. I spent a good deal of time thinking about that very question when I was with the Army.

I would share the view that it could be made to work either way. I think it is important to protect the bridge in going from development into production because that is one of the toughest parts of the whole process.

To hand items over at that point in terms of responsibility of people probably is unwise.

On the other hand, one can make a break between the developer and producer at points further downstream in the process. For example, when you have a proven data package for something in production, one could certainly make a break at that point. I think there is a good deal of merit in considering that approach.

The role of the developer is a tough job. It might be very appropriate to have someone else worrying about the spare parts and manufacturing once the system is truly in production.

Chairman TOWER. My time has expired.

Senator Nunn?

Senator NUNN. Thank you, Mr. Chairman.

I want to thank both of our witnesses for being here and also for your great service to the country during your tenure in the office. I want to congratulate you.

On the service Secretary staff the current administration has given more responsibility to the service Secretaries, as I understand it, in the actual management of procurement.

I know Secretary Lehman has testified about a great number of procurement initiatives he has taken, management initiates, and so forth.

Are you suggesting that they should not be responsible for the management of procurement, that that ought to be handled by the services themselves or what are you suggesting as to service Secretaries' involvement in procurement management?

Mr. PACKARD. I don't think you need to change their responsibilities too much. I think they can use a common staff and still maintain some responsibilities.

The way I see it is that the service Secretary and the service Chief ought to work together as a team.

Now, there has been a lot of management theory about how you have to have one man in charge and he has to have his own staff and all of that, but there are also management practices in other parts of the world that work very well, two people working as partners, and I don't think you are changing the responsibility so much as you are cutting down the number of people that you have involved in this problem.

Senator NUNN. Mr. Augustine?

Mr. AUGUSTINE. The responsibility of the services, as this committee knows, is to recruit, train, and equip the forces. The service Secretary should be responsible for the service carrying out those functions. He has to be in charge.

My question would be how large a staff he needs of his own to do that. Why can't he share the staff, which is already very large and very capable, which provides support to the Chief of the service?

In my experience that staff was very responsive, very responsible and had a very good relationship with the Secretariat.

My question is simply whether we need a duplicate staff. I include high level positions when I refer to staff in that context.

Senator NUNN. According to the figures I have, the Army has a service Secretariat staff of 362, the Air Force has a staff of 330, the Marine Corps part of the Navy, 42, and the Navy, 794.

If you count the Marine Corps, you really have over 800, about twice as many in the Navy as in the Army or Air Force.

Is there any apparent reason for that?

Mr. PACKARD. I can't answer that question except to say that the Navy tends to be a little bit more compartmentalized, has been in existence longer and it has had more time to build up staff.

I don't know any specific reason why the Navy staff should be proportionately larger than the other services.

Also, the service Secretariat staff is usually smaller than the service Chief's staff. It is not just a matter of size. It is the fact that you have to go through these two staff processes and that slows everything up and every staff has to have some input in order to justify its existence.

So, you just complicate things by having a group even if it is not very large.

Senator NUNN. Mr. Augustine, is there a reason that the Navy's is larger?

Mr. AUGUSTINE. The only fundamental thing I can think of is that there are, in fact, legislative differences between the way the Secretariat and the services are established.

For example, the R&D civilian leader in the Navy is actually the procurement official by law whereas in the other services that is not the case.

On the other hand, I really can't account for that large a difference in staff size by such dissimilarities.

Senator NUNN. I am sure that Senator Warner can straighten that out when he gets around to his questions.

Mr. Packard, you mentioned the difference between corporate and DOD procurement.

Would you emphasize that again for us? What is it that is fundamentally different between the way you would procure goods and services in the corporate world and the way you would procure them in the Department of Defense?

In other words, what can we learn from the corporate world in terms of Defense Department procurement?

Mr. PACKARD. I think you can learn some things. The Government's top job is very different in that it has a political facet that the corporate world doesn't have. So, that adds a complication that you don't have in the corporate world.

I think the basic principles of management apply in either case.

What you want to do is establish an objective. Those objectives have to be established from the top side. This is a service requirement or this is what weapon will be developed. You establish this objective and then you turn it over to the division, whoever it is, of the service who will accomplish this.

Then you evaluate their performance on how well they accomplish it. You don't tell them how to do it. That is the common practice in the rest of the world.

I don't see why you can't benefit from that practice in our military organization. It is just simply a matter of dividing responsibility and everybody can't be doing everything.

It works extremely well if you have certain objectives established and if the people who are supposed to do the job know what they are supposed to do and you give them authority to do it. We just have a completely mixed up system here, it keeps getting stirred up all the time, as indicated in the other testimony.

I think fundamental management, good will toward management applied to how we do this job would be very beneficial.

Senator NUNN. Mr. Augustine, you have written a book on various management characteristics of the Department of Defense. You lay down certain laws.

What laws do you feel are necessary that the Department of Defense violates now in terms of management principles?

Mr. AUGUSTINE. One that would certainly come to my mind would be the need to delegate responsibility and to make very clear where it lies.

Another would be do not change things unless they absolutely have to be changed. I mentioned before since in my mind that is the most serious failing we have.

Budgets change, people change, requirements change, organizations change. The impact of that from where I sit in industry is that companies are very reluctant to invest to be more productive because they don't know whether the programs on which they are working will be around tomorrow.

It is very difficult to motivate employees when they don't know whether the programs on which they are working will be here tomorrow.

Industry spends a major part of its time trying to keep programs funded rather than trying to execute the programs well. I think the same is true of the Defense Department.

Those are a couple of the things I would point to, Senator.

Senator NUNN. Are there any laws that the Defense Department adheres to and follows well?

What would you say is good about the procurement process now?

If we are looking at the organization, what should we strive to preserve that is there now, if anything?

Mr. AUGUSTINE. That is a tougher question than the first one you asked.

I guess I come back to people. There are some very dedicated, very capable people in the Government, very committed to doing a good job. I admire them for what they are doing under extremely difficult circumstances. I would point to that.

I would point to the operational part of the military, to the discipline that one sees, superb discipline in the combat commands.

I have to say, in sharp contrast with that, there is almost a total lack of discipline in the acquisition process.

In industry when a decision is to be made, it is often strongly debated by people on all sides of the issue. Once a decision is made, however, it is ludicrous even to imagine that everyone wouldn't get behind that decision and do all they could to make it a success.

On the other hand, in the acquisition process those who opposed the viewpoint that prevailed in the decision cycle merely get ready to take it on again the next budget cycle.

I greatly admire the discipline in the combat part of the military, but not in the acquisition part.

Senator **Nunn**. Thank you, Mr. Chairman.

Chairman **Tower**. Senator Warner?

Senator **Warner**. Thank you, Mr. Chairman.

Mr. Packard and Mr. Augustine, it is nice to see you again.

Mr. Chairman, one of the great privileges in my lifetime was working as one of Mr. Packard's Deputies in the Department of Defense. When we sat down trying to work out a reorganization plan, Mr. Packard had a very simple one: "I will listen to what you have to say and then you will do exactly what I say."

His Secretaries reported to him regularly. We saw Mr. Laird once or twice a week. Mr. Packard made himself available at any time we wished to work with him.

Indeed, I know of no one who was a better teacher, instructor, disciplinarian, and manager than Dave Packard.

Mr. Augustine, while I didn't work with you, I have always admired you. You certainly have hit on one salient point this morning and that is keeping programs alive that should have expired.

There is that built-in institutional ability to keep those things going and dragged out for an interminable period.

Mr. Packard, one subject that bears indirectly on the framework of our discussion today is the spare parts. The Nation is greatly concerned with reports that the Department of Defense pays excessive amounts of money for articles which can be purchased at corner hardware stores for a fraction of what the Department of Defense is paying.

In view of your extensive experience, both on the manufacturing side and the management side in the Department of Defense, do you know of any means by which we can address this issue and curtail it?

Mr. **Packard**. I might give you a little satisfaction in saying that sometimes that problem happens in industry, too, and it happens in this way.

You have a particular piece of hardware that is used in equipment. You want to be sure that hardware is the correct piece. You buy that in large quantities for your production run.

Then if somebody wants to have a spare part, you have to go back and do a lot of paperwork. So, there is some justification for some increase in cost because of the paperwork and to make sure you have the right part for the right place and you have to show them how to put it in place, and so forth.

That does not account for some of the big differences that I have seen reported on recently.

That would account for maybe a 50-percent increase or a 100-percent increase in the cost over what you could buy the piece for in the local store.

There are several things that can be done in certain weapon systems or certain pieces of hardware.

One of them is to use manufacturers more effectively for field support. We have had some experience in our company where we have provided spare parts instead of having to go through the system, somebody using the equipment coming directly to our people and getting the part directly so they shortcut all of that.

That won't work unless you are involved in a standard commercial product or product where the parts aren't available.

The other thing to do is to try to provide for an adequate level of spare parts at the time you secure the equipment. That, of course, is a procedure that has been used. The difficulty with that is that it is almost impossible to know how much you are going to need to support a program.

You have various formulas. Probably if you looked at it, you waste more money by having a lot of stuff you don't really need that didn't cost very much per unit, but added up to a lot.

It may not be as bad as you think to pay more for a particular item. What I am really saying is that this is not a completely simple problem. It should not result in costs that are 10 times what the real cost should be. It might result in cost two times that, which would not be unreasonable.

If you try to buy everything you might need, you might be wasting a lot of money. If you don't buy until the part is needed, one piece might be very expensive to procure on a single item basis. It is not a simple problem.

Senator **WARNER**. Mr. Augustine?

Mr. **AUGUSTINE**. Yes; I would distinguish two cases in the generic spare parts problem.

One is where a contractor knowingly and willingly attempts to gouge the Government. In that case I think that individual and company should be prosecuted to the maximum extent you can. I think that sort of thing undermines support for defense and, undermines the reputation of the manager who, in fact, tries to manage responsibly.

The other category is the case where for administrative reasons, for example, overheads are spread in a manner that makes it appear the cost for a specific item is inappropriate. The solution to that is to change the overhead structure.

I would also point to the need to buy spare parts from the original producers of those parts if they are truly off-the-shelf items. Don't go to the major prime contractor for such items.

Last, I would point to the need for the Government to be very careful in its specifications for those bolts mentioned earlier. Don't compound the problem.

I would cite my one brush with the spare parts issue where we did indeed ask the Government to go buy the item in question from the original supplier and pointed out they could provide it much more cheaply. In this case, the supplier, a commercial house, refused to do business with the Government.

They said, in effect, "We don't deal with the specs you gave us. They are to onerous."

So, the Government came back to us and said, "Will you please buy it for us?"

It is very important for the Government to be careful that the specs are realistic and that they don't ask for things that are not necessary.

Senator **Warner**. Turning to the issue of the service Secretaries, I personally supported the continuation of the office in my service for reasons which I don't think are relevant right now.

It occurs to me from the experience of having served with you and then your successor a combined period of 5 years, that the existing framework enables the Secretary of Defense and his Deputy to really guide the service Secretary in a manner consistent with their own philosophy and in all probability we don't have to have a change in the law.

To restate this in simpler terms, what you and Mr. Laird said after giving the service Secretary an opportunity to comment was carried out.

I guess I come back, you have two strong people occupying SecDev and DepSecDev positions. They, in turn, can frame the work to be done by their principal deputies; namely, the service Secretaries.

Mr. **Packard**. That probably is true. I will say that Secretary Laird and I found it very helpful to try to work closely with you people who were the service Secretaries. I think we did have a close working relationship.

Possibly if we told you to cut down your staff, you would have done so. I am not entirely sure.

Senator **Warner**. You did on occasion.

Mr. **Packard**. So, there can be some control, I think, in this area.

Of course, what happens, as everyone knows, the styles of people are quite different in these jobs. Here you have some very strong and some very good service Secretaries and there is a feeling of having a larger influence than was the case in other times.

Senator **Warner**. You are saying we need a revision of the laws to protect the Department of Defense from an inequitable strength between SecDev and SecNav?

Mr. **Packard**. What you need to do is cut down the number of people looking over all these programs. It makes no difference where you cut it down, service Secretary or OSD, you probably could cut it down at both levels.

I think the service Secretaries can perform a very useful and effective function without having to duplicate in every functional area the staff of the service Chiefs.

That is what I am saying.

Senator **Warner**. Thank you, Mr. Chairman.

I thank the witnesses for their participation in this important hearing and traveling great distances to make their knowledge available.

Chairman **Tower**. Senator Bingaman?

Senator BINGAMAN. Thank you, Mr. Chairman.

Let me say, Mr. Packard, if I could, your idea of putting more emphasis on the managers of these programs, the systems themselves, is an excellent one.

I think you made reference to the fact that we just did not have professional expertise on the management side that we need in the Department of Defense.

Is it realistic to think we can develop and retain that kind of expertise with career people in the Department of Defense or would we be better off trying to hire that expertise from the business sector?

Mr. PACKARD. I think you can do it with people in the Department of Defense. It really simply involves establishing what you might call two career patterns. I cited a historical example of this.

If you want to look at the military position, the Corps of Engineers was in a sense a separate professional service that built the fortifications.

The fighting corps was on the other side.

You have some examples in history where you have had a professional group of military people specifically assigned to a job, which is a noncombat job and becoming very proficient at it.

I don't see why we can't do the same thing in the procurement area. That is what I am talking about.

Senator BINGAMAN. My concern is the expertise that you need to manage a large weapon system. The procurement and the development of a large weapon system, I assume, is a very salable commodity anywhere in the corporate world as well.

Unless you can pay much larger salaries than we are now able to pay, I am just wondering if you develop this cadre of career managers who are needed to do this oversight, if they won't be stolen away in a hurry?

Mr. PACKARD. I don't think you will have a serious problem there. Right now you have a lot of good people in the services at all levels, but you have them trying to do too many different jobs.

What I am suggesting is that you give them a choice, they make a choice and it involves committing themselves to a career in management or procurement, however you want to call it. It involves some continual on-the-job training because this whole business is continually changing. What you learn today will not be adequate for what you need in 5 or 10 years.

Now, the military pay and the opportunity for the officers is reasonably competitive if you look at options for early retirement and what they get in retirement income, and I think you would find a lot of these people quite willing to stay in the service, knowing when they finish their career they would have a good opportunity in the private sector.

So, I think you would have that going for you.

Senator BINGAMAN. Do we also have the same problem with people who have scientific backgrounds in research and all being moved in and out of scientific research positions?

I have encountered that in my home State of New Mexico, some of the people there who were with the weapons labs indicating they are shifted out of the types of jobs that they really were educated for and put into management-type positions that they really didn't have any interest or expertise in.

Mr. **Packard**. As a matter of fact, I chaired a subcommittee in the White House Science Council that studied this whole Federal laboratory question last year. We made some recommendations which we think will help get our money's worth from these laboratories.

One of the problems is that the salary levels at the entry level are not adequate to attract the best young people from the service and engineering schools.

In fact, if you go around these schools, it is the poorer students who are the only ones that will go to the Federal laboratories now. Then once they get people there, they begin to move up, the salary structure is not such to keep them in a scientific assignment, they have to move over to some administrative assignment to get adequate compensation.

Those things I think can be very easily corrected in labs operated by independent contractors. All you need to do there is to give the contractor authority to establish and administer an appropriate salary policy. That has been done in some of the labs very well.

It has not been done in some of the laboratories as well as it should. When you get to labs operated by the civil service people, I think there is going to have to be some change made.

There was an experiment that was done out at the Naval Weapons Laboratory at China Lake where they allowed them to set up a program which has some flexibility. We looked at that and it is working very well. We are recommending that system be expanded to all of the DOD Laboratories.

We have talked to Secretary Weinberger about this. I think he is going to followup some recommendations. I hope this committee will support the recommendations.

There are some things that can be done. That is a special problem and important one because it would give us better utilization of these laboratories.

Senator **Bingaman**. Let me just ask one other question for either of you who have a view of it.

To your knowledge, is there anything being done today by any of our business schools, graduate business schools, to help solve this problem that we are talking about, of lack of managerial expertise in the Defense Department?

Are there any programs in any of the business schools addressed to that problem?

Mr. **Packard**. I don't believe there are any programs in the schools specifically set up to address that program.

As I mentioned earlier, we established the Defense Management School at Fort Belvoir. Some people from various business schools have been involved in part-time faculty there. So, that has some input and help from some of the business schools.

As a matter of fact, there is some debate now about whether the business school is doing a very good job developing managers for the commercial users, too. The answer is that I don't think anything very specific is being done. There may be, but not that I know of.

Senator **Bingaman**. Thank you very much.

Mr. AUGUSTINE. I would like to point out that Mr. Packard was unduly modest. The Defense Management School that he started is, in my mind, a superb institution. It trains people very well for the specific task of defense acquisition. I think it is one of the bright spots in the whole process.

Given that we have fine graduates, we have to do two other things. We have to put them in assignments where they can use the training they received and, second, we have to pay them adequately and put them in a work environment where they want to stay.

Most of the better people I have seen who leave the Government to come with industry left only in part because of salary differences. More often it has been over frustration and over struggling with the system.

Senator BINGAMAN. That happens here on Capitol Hill occasionally.

Thank you very much.

Chairman TOWER. Senator Quayle?

Senator QUAYLE. Thank you Mr. Chairman.

Mr. Packard, do you think Congress should move from an annual budget to multiyear budget?

Mr. PACKARD. I think a multiyear budget is a very important and helpful move in managing these programs.

In the first place, the contractors are put in a very bad spot where they don't know for sure whether they will be able to continue a program at a particular level. One year is too short to do the proper planning, implement a program and get it underway.

It would reduce the amount of changes and certain turmoil you have in these programs. I think it would be a very constructive thing.

Senator QUAYLE. Mr. Augustine?

Mr. AUGUSTINE. I would strongly endorse that. I think perhaps the largest payoff is that it would give managers at least every other year to truly manage their business instead of worrying about whether the budget is going to be there or not.

I would add a caution that the 2-year budget could make it more difficult to respond to new opportunities on short notice.

For example, if there is a technological breakthrough, you would like to exploit it. One would not like to wait 2 years before the budget came up for review before you could exploit that change in technology.

I think some latitude needs to be allowed, perhaps in the form of emergency provisions such as the Department had 10 or 15 years ago so that you could respond to targets of opportunity.

But for 99 percent of the budget, we would be very far ahead to go to 2-year budgeting.

Senator QUAYLE. Both of you talked about the staff at OSD and also service Secretaries.

Could you indicate where there might be a Joint Staff, OSD, and Secretary, rather than having it separate right now?

Would there be a concern about duplication and too many people getting into the acquisition process? Would that be an option?

Mr. PACKARD. I really think a Joint Staff between the service Secretary and the service Chiefs makes more sense than between the service Secretary and the Secretary.

There is good reason to try to encourage a spirit of teamwork between the service Secretary and his Chief. In a sense, he is there because he is supposed to provide the civilian input to the management of that service.

I don't think combining the service Secretaries' staffs, knowing that end of the Office of the Secretary, would be the right way to go.

Senator QUAYLE. The service Chief and the Secretary, rather than the other way, would be your recommendation as far as consolidation?

Mr. PACKARD. Whether you can or can't improve the quality of the people in these management programs, you do have good staff work at the service level. You have some strength there. I don't see why it has to be duplicated at that point.

There is always a tendency for someone who has an oversight responsibility to be able to get into all the little details. When you do that, then you tend to disrupt the process.

What you really ought to do is not look at the details, but look at the final result.

One thing has not been brought up here that I think is extremely important. The way to control these programs is to make a career of the people who are doing the management work depend on their performance. If they goof up a program, that could have a serious impact on their career. That is the way you get these things under control.

Senator QUAYLE. On that issue, and it has been emphasized today, on getting the more responsiveness and management incentive, giving them authority to get things done, are there any steps that Congress can do to enhance the responsibility of the key managers?

We have talked a lot about it, but I haven't heard testimony on specific recommendations.

Is there something Congress can do without getting into micromanagement?

Mr. PACKARD. The fact that the committee is holding this hearing is a constructive step. The subject has been talked about for some time.

There is a certain amount of movement in the service to encourage people to move in the direction of committing themselves to procurement. I mentioned examples of some people who have done this and have done it very well. Admiral Rickover is one.

I think the Congress could very easily formulate some legislation that would encourage movement in this direction.

Senator QUAYLE. You are not talking about organization necessarily; you are talking basically about giving these people more authority and holding them accountable for what they do.

I am curious as to what Congress' role would be in trying to go in this direction.

Mr. PACKARD. It seems to me you could simply stipulate that the major weapons procurement programs are going to be managed by people who have been set up as professional career managers to do the management work.

They should be selected carefully for management ability. They should be given continual on-the-job training and they should be left in an assignment long enough to get the job done and not be rotated.

That can be done. We did it on the F–15 program where we had been discussing this problem and we got a good man. We put him in charge and left him long enough to get that job done and that program came out quite well.

Senator QUAYLE. One final question.

Mr. Packard, on page 8 of your testimony, you say, "I encourage the Congress to insist on the use of the prototype approach when possible."

Mr. PACKARD. I have not said very much about prototyping. You give me a chance to do it.

Senator QUAYLE. I would like to know how you think we can construct it. I happen to agree with it.

The example you see on the next page is the contractor who bid too low.

Mr. PACKARD. That is a very specific example of setting the overall objective and being able to follow through, see how he does it, and evaluate his performance. It is one way you can really get competiton in developing a new weapon program.

If you look at the A–10 and F–16 and F–17, the AWACS radar, I think you will find that you really have gotten better programs that way than otherwise. It seems to me that is something that the committee could have a great deal of influence on if you want to.

Senator QUAYLE. Do you think we should set a threshold or should we say, on a certain dollar amount these programs should be prototyped?

How could we, the Congress, insist that these programs on major weapon systems be prototyped?

Mr. PACKARD. There are some questions. I don't think they would prototype a B–1 program, for example. It is too big and you couldn't get anybody to spend that much money.

But you could require that the B–1 program have many of the subcomponents developed on a prototype basis and that would require the contractor to get two samples of radar or whatever it is and test them against each other and really find out what you are doing.

If you do that, you don't have to worry about the detail. You tell them what you want and you find out whether they have it and you put a lot of competition in it. The guys are going to work pretty damn hard to make the best product. You don't have to worry about all the in-between business.

Senator QUAYLE. Should there be a prototype threshold?

Mr. PACKARD. I don't see why you can't set some rules. As to the size of the program, it is a little hard to say. The F–15 and F–16 programs are good examples. These are major weapon programs that turned out very well.

If you look at the amount of money we have spent on the main battle tank, if you had put that in a prototype program at the time, you might have come out with a better tank at less money.

It is awfully hard to see what the threshold should be. I would certainly encourage this committee to see if it can get the Department to go back and do more of this prototyping. I don't know why they have gotten away from it.

Mr. **Augustine**. I, too, am a supporter of the idea of prototyping. There is no flat rule for when one should prototype. It is a judgmental issue. But there are some good indicators.

A program where there are alternative technical approaches is one that is certainly a good candidate for prototyping.

Also programs where unit costs are not inordinately large. Certainly one wouldn't prototype CVA's. Another would be where the procurement costs are large compared with the development costs. That is a very good candidate for prototyping.

I think one could set up a template to identify appropriate situations.

I have some statistics I have gathered that always intrigue me. When you have competition in the form of paper, the incumbent, if you will, and I describe that as a contractor that built the previous version of the system in question, wins two-thirds of the time.

When you prototype, the dark horse wins two-thirds of the time. This suggests to me that there is something to be gained by giving people a chance to show what they can do with hardware instead of paper.

Senator **Quayle**. I thank both of you for coming and, Mr. Chairman, for continuation of this hearing.

Chairman **Tower**. Gentlemen, I would like to conclude by asking both of you to comment on something Mr. Augustine touched on.

That is how Congress has adversely impacted on the process from time to time. What is it we do that is counterproductive, that inhibits efficiency, cost effectiveness or war fighting capability, getting too much into micromanagement?

When we see a problem, we try to micromanage it ourselves. Where do we go wrong? I think we have to look at ourselves and our own role in the thing. So, you may fire both barrels as far as I am concerned.

Mr. **Packard**. Mr. Chairman, I think I touched on this matter in implying it is a kind of chicken and egg matter.

In a sense, I can't blame you for getting involved in some of these things. The Army antitank missiles that I read about the other day that states if you had not gotten into it, they would have gone off on the wrong track.

The real issue, every time I look at it, gets back to the question of how do we get the job done better in the first place.

If you were confident that these developments were being done well, you would not need to have all the staff running around looking into them.

It is kind of a hard thing to say. I think everybody agrees that the more people you have looking at these things, the more distraction you have from getting the job done.

I can't say I blame you entirely for wanting to do it when you see things that obviously need some attention. I would say let us see if we can concentrate on getting some good management on the program to begin with. I think if we do that, you will find you won't have to do so much detail and checking up on these things yourself.

Chairman Tower. Mr. Augustine?

Mr. Augustine. I would point to the fact that the Congress votes 18 times a year on each R&D budget item, at the committee or subcommittee level or on the floor.

An R&D program takes about 8 years to execute; 8 times 18 is a big number. You would have to use one of Dave's calculators I guess, to figure it out.

I would also suggest that you not get involved in deciding which airplane should be bought. Instead, it would be better for you to address whether we do need an airplane.

I also think that the Congress provides an inordinant amount of language in terms of how a program should be run. This has a major impact on those at the other end of the pipe.

Further, Congress budgets 1 year at a time. That compounds the difficulty. I believe the Congress has been very reluctant to delegate and to hold people responsible.

If the Government's managers can't perform, get rid of them. That is one of the big differences between industry and Government.

Respectfully, sirs; those are my comments.

Chairman Tower. Do you think we porkbarrel the defense bill too?

Mr. Augustine. I don't think the problem is so much porkbarreling as it is just a desire to get in firsthand and try to fix something that is not working.

I suppose there is some of what you ask. I wouldn't view its extent as a big problem.

Chairman Tower. I am talking about extending production systems beyond the requirement, things of that sort, or establishing a program that has constituent interest.

Do we do too much of that?

Mr. Augustine. There are clearly examples of that, but, to my mind, that is not the major problem.

To my mind, the board of directors is trying to act like the head of an operating division. That is the problem.

Chairman Tower. I gave you plenty of opportunity there. It wasn't as big a bang as I expected.

Gentlemen, I thank both of you for taking your time to give us the benefit of your knowledge and your experience today. I appreciate very much what you have done and the service you have rendered already. I think this has been a very useful contribution to our efforts.

Thank you very much.

Mr. Augustine. Thank you.

Mr. Packard. Thank you, Mr. Chairman.

Chairman Tower. The hearing is recessed until tomorrow at 10 a.m.

[Whereupon, at 12:55 p.m., the committee adjourned, to reconvene at 10 a.m., Thursday, November 17, 1983.]

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